THE

PRACTICE OF MEDICINE

ON THOMSONIAN PRINCIPLES,

ADAPTED AS WELL TO THE

USE OF FAMILIES AS TO THAT OF THE PRACTITIONER.

CONTAINING

PROPOSITIONS ILLUSTRATIVE OF THE

PHILOSOPHY OF THOMSONIANISM.

A BRIEF HISTORY

OF THE SYMPTOMS, PECULIARITIES, AND GENERAL COURSE OF DISEASE IN ITS DIFFERENT FORMS AND VARIETIES.

WITH

PRACTICAL DIRECTIONS FOR ADMINISTERING

THE THOMSONIAN MEDICINES,

INCLUDING THE VARIOUS METHODS OF ADMINISTERING VAPOUR BATHS, EMETICS, &c.

AND

A Materia Medica,

ADAPTED TO THE WORK.

BY

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TO

DR. SAMUEL THOMSON,

THE

PHILOSOPHER IN MEDICINE,

AND

FOUNDER

OF THE

THOMSONIAN SYSTEM OF MEDICAL PRACTICE,

THIS WORK

IS WITH DUE RESPECT INSCRIBED BY

THE AUTHOR.

TO THE READER.

THIS work is presented to the public as a *Practical Guide* in the treatment of disease, in accordance with the *principles* of medical science discovered and promulgated to the world by Samuel Thomson.

The author does not claim to have made improvements upon the fundamental principles of the Thomsonian system of practice. Daily observation affords confirmatory evidence that this system is based upon correct principles; and that the remedial means therein employed, are adapted to the cure of every variety of disease that is curable by means of medical treatment. What I have aimed at in the following papers, besides a description of the symptoms and peculiarities of the principal varieties of disease as detailed by medical authors, has been to point out that treatment best adapted to the different forms and stages of disease under various conditions of the system. Notwithstanding disease should be treated upon general principles, regardless of names, still there are varieties of it that demand more prompt and energetic treatment, than others in which the patient is apparently in a more dangerous condition. Thus in croup, for instance, an hours delay in applying the proper remedies may allow the disease to pass to an incurable stage.

In the directions for treatment, repetitions have been introduced which to many will appear superfluous. This course, however, was deemed necessary in a family work.

The Thomsonian system, based upon correct principles, needs not the garb of *mystery*, often employed to conceal imperfection and to give to *false knowledge* the *appearance* of *science*. It is here before the community stripped of all disguise. The cause of the continuance of disease being resisted and overcome by vital action, medical treatment to prove beneficial must harmonize with the principle of life. This is the corner stone principle of Thomsonism, the starting point and guiding line for directing the treatment in every variety of disease, in all its stages.

Although I have recommended some articles of medicine not employed in the Thomsonian practice generally, still I am not an advocate for enlarging the list of remedial agents beyond what is necessary to fulfil important indications for the cure of disease. Indeed the more the practice is simplified and restricted to the employment of general remedies, the more successful will it prove. The medicines introduced to the notice of the reader, not recommended by Samuel Thomson, have been found beneficial for the purposes to which they are applied, and others contained in his materia medica of a less useful character have been excluded.

J. W. C.

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PRINCIPLES OF MEDICINE.

I. Matter in all its diversity of character, quality, form and combination, may be classed in two great divisions, namely: *Organic* and *Inorganic matter*.

II. *Organic Matter* includes the two vast kingdoms of nature; the animal, and the vegetable kingdom.

III. *Inorganic Matter* includes all bodies not possessed of *life*, and are not endowed with a *capacity* for life.

IV. Without organization there cannot be life; and again, organized bodies, though possessed of a capacity for life, require the impression of "stimulants to call it into activity."

V. "Life, is the consequence of the operation of stimuli or excitants, on organized matter."—*Brown.*

"Life, is the organism in motion."—*Richrand.*

"A proper organization, and suitable temperature, produces life and motion."—*Samuel Thomson.*

VI. "Caloric, or Heat, is the cause of life and motion."—*Thomson.*

VII. "Caloric, whatever be its nature, is the first and most important of all stimulants; and if it ceases to animate the economy, others loose their influence over it."—*Broussais.*

VIII. It is by the animating power of heat, that the system becomes susceptible to the impression of other life-supporting agents, as air, light, electricity, galvanism, food, drinks and medicine.

IX. "If the system be deprived of caloric for a certain length of time, all the preservative, recuperative, and sanative phenomena cease. It is the same also as respects oxygen."—*Broussais.*

X. Caloric brings into play that power, (assumed to be an electro-galvanic influence,) which is the immediate agent of every movement that takes place in the living system: operating through the medium of the nervous apparatus, carries on and governs all the vital functions, respiration, circulation, digestion, nutrition, assimilation &c.; selects and expels effete or worn out matter by the pores of the skin, the kidneys, and other depuratory organs, carries on all the various secretions; endows the organs with sensation; and enables the organization to resist the influence of causes that tend to its destruction.

These facts or principles constitute the basis of medical science.

XI. During the early period of life, heat is derived from the medium in which the young being is placed—in the higher order of animals, and in man the mother furnishes the heat necessary to awaken and sustain vital action, but when the organs becomes developed, the system acquires the power of producing or generating heat. The lower order of animals, such as reptiles and insects, depend upon heat from the sun, and when the heat sinks, to a certain degree, they become torpid and inanimate until the supply of heat is sufficient to rekindle vital action.

XII. "While the assimilation of food in vegetables, and the whole process of their formation, are dependent on certain external influences which produce motion, the development of the animal organism is, to a certain extent, independent of these external influences, just because the animal body can produce within itself that source of motion, which is indispensable to the vital process."—*Liebig*.

XIII. "The first conditions of animal life, are nutritious matters and oxygen, introduced into the system."—*Ib*.

XIV. "The mutual action between the elements of the food, and the oxygen conveyed into the circulation of the blood to every part of the body, is THE SOURCE OF ANIMAL HEAT."—*Ib*.

XV. A good digestion, and a proper supply of food and air, are necessary, in order to cause the amount of heat to be generated, necessary to maintain healthy action in the system.

XVI. The stomach is the "Throne of life," the great centre from which the vital energy is generated. While the stomach retains its power, it continues to generate the vital energy, necessary to sustain healthy action throughout the system. "The stomach is the fire-place of the system, and food is the fuel that furnishes the heat upon which life and motion depend."

XVII. In proportion as the power of digestion is weakened, will the heat generating power be weakened. And the power of resisting disease will be lessened in the same ratio that the power of generating heat is lessened.

The digestive functions are always more or less impaired in disease. Coldness of the system, languor and debility, and loss of appetite are symptoms that prevail in the beginning of disease of every variety; and the vital force resisting the cause of disease occasions fever; and it is through the agency of vital energy or the heat producing power that disease is overcome. This fact furnishes the starting point and guide to the practition of medicine in the application of remedies to cure disease upon correct principles.

"In disease, support the power of inward heat, until the stomach is in a condition to digest food."

XVIII. Two great sources of disease are exposure to cold and dampness, and improper articles of food or drink taken into the stomach. In the first case the heat or vital energy being abstracted from the body faster than it is generated, the vital functions are weakened and a sense of coldness and listlessness is experienced until reaction or fever comes on. When digestion is lost from internal causes, the system becomes cold, because the power of generating it is weakened.

Exposure of the feet to dampness and cold is a very common source of disease. Dampness, probably, operates as a conducting medium, by which the caloric, but more especially the electro-galvanic or nervous fluid escapes, not only from the lower extremities but from the stomach and all the viscera of the abdomen through the medium of the nerves, which form a connected chain of conductors or channels throughout the system. When the nervous fluid escapes faster than it is generated in the system, the vital functions over which it has control become enfeebled or deranged.

During the prevalence of Cholera, some years since, in those attacked with it the digestive functions were so completely prostrated in many cases that the patients died without any signs of reaction: continuing cold and cramped from the commencement of the disease to its termination. In these violent cases, the functions of *calorification* and *enervation*, or the power of generating heat and nervous energy, were suspended. The treatment that proved most effectual in curing this fatal disease was the application of the vapour bath; emetics of the 3d preparation of lobelia and the free use of cayenne and other powerful stimulants. This same plan of treatment is adapted to the cure of all violent attacks of disease, as it constitutes the most effectual means for sustaining the vital energies, and for evacuating the stomach of undigested food and other morbific matter, and restoring its lost power. In fever although the heat of the surface is increased above the natural standard, yet the amount generated is less than is produced in a state of health. The secretions and transpirations from the mucous surface being to a great degree suspended, the heat is locked up, as it were, in the system, and

this, it would seem, is a wise provision for retaining the heat, to sustain the recuperative actions. The most fatal forms of disease are those in which the system looses the power of generating heat; as cold plague, violent cholera, and the most severe cases of scarlet fever and yellow fever—being unattended with fever—the principles of life being extinguished, and the system unable to react.

XIX. The first symptoms in disease, prove a weakened condition of vital action. As the vital force reacts against the cause of disease, a new train of symptoms ensues: the pulse becomes quicker and stronger; the surface becomes hot and dry, and the system is in a state of feverish excitement, in other words the patient has a *fever*. The vital principle resisting the cause of disease, occasions fever and it is by this power of *vital resistance*, that disease is overcome and health restored. For instance, intermitting fever as it is termed, commences with a chill. When reaction takes place, fever comes on, and after a contest of from less than an hour, to several hours, between nature and the enemy, a favourable crisis is formed: perspiration comes on, the capillary circulation is restored, the pulse softens, and in many instances the patient will be in apparently pretty good health, until the succeeding chill, when the constitution again rallies under the control of the vital principle, and establishes the same preservative health-sustaining action constituting fever, terminating by the critical evacuations, from the skin and kidneys.

XX. All acute diseases come on with the same general symptoms, these are chilliness, debility, and loss of appetite, and whenever fever comes on, it is occasioned by the vital force instituting the movements or actions, necessary to resist the influence of the cause of disease, and to bring about critical evacuations, to remove the effects of disease and restore health. It is by vital action that disease is cured, and no remedy should be employed for the cure of disease, that does not act in harmony with the vital principle. Thomson's system is based upon the principle of assisting nature, the only true principle of treating disease.

"My general plan of treatment" (observes Dr. S. Thomson,) "has been in all cases of disease, to cleanse the stomach by giving an emetic of lobelia, and produce as great an internal heat as I could, by the use of cayenne pepper, or other stimulants under the head of No. 2; and when necessary, make use of the steam bath, in which I always found a great benefit, especially in fevers. After this I gave a tea of bayberry, or of a compound of the articles under the head of No. 3, to clear off the canker; and in all cases where the patient had not become so low that the constitution had nothing left to build upon, I have been successful in restoring them to health."

In eruptive diseases, as small-pox, measles, and scarlet fever,

there are always in the commencement, general debility, chilliness, and a disordered stomach. These are the direct effects of the morbific agent that produces the disease, and but for a counteracting influence, vital actions would be overcome. The constitution establishes a reaction or fever, by which the disease is thrown to the surface, producing an eruption on the skin.

XXI. The design of reaction or fever, therefore, is to restore the lost heat and vitality, and remove all morbific or deleterious agents and their effects from the system.

XXII. A course of treatment that will cleanse the stomach and bowels and restore their natural warmth and action, will remove fevers, by assisting to bring about what the fever is designed to accomplish. When the offending cause is removed there will be nothing to excite fever or reaction.

There is another and very opposite plan for subduing fever, to wit: By reducing the vital forces or the recuperative efforts of nature, by bleeding, purging, and the use of poisonous agents, as nitre and antimony. This, though the fashionable practice, is nevertheless unnatural, unsuccessful, and hazardous to the future health, if not to the life of the patients on whom it is practised.

XXIII. An important indication in the treatment of acute disease, attended with high arterial excitement or violent fever, is to overcome the contracted or spasmodic condition of the capillary vessels by relaxing the system with means which harmonize with the living principle, and that will promote vital energy, or, inward heat.

To effect a relaxation of the system there is probably no agent of equal value with the lobelia inflata. This medicine exerts a surprising influence in equalizing the nervous power, and in relaxing the system, without weakening the vital properties. In many instances, however, fever may be removed by the same means alone that will overcome a chill, to wit: pure stimulants and the vapour bath. Medical men of the old school, have not made a proper distinction between pure stimulants that strengthen and promote a healthy action, and those agents which occasion morbid excitement at the expense of the vital powers. A patient, in a fever that would be injured by brandy, would in the same condition be benefited by drinking freely of capsicum tea.

XXIV. As a consequence of a reduction and derangement of vital action, there are in disease, thickened morbid secretions, by Dr. Thomson termed "canker," formed on the lining membrane of the stomach and bowels. The stomach becoming coated with thickened tenacious secretion or "canker," is probably a general

cause of a disease being protracted. It is an observation of Samuel Thomson, that "where there is a settled fever there is canker seated in the stomach." The tongue is more or less coated with "canker" or morbid secretions in diseases, and its appearance affords a criterion by which to judge of the condition of the stomach. A tendency in this "canker" to soften and clean off from the edges of the tongue, is usually one of the first signs indicating a favourable crisis in a disease.

To remove the "canker," (I make use of this term because it is the one generally employed and understood by Thomsonians) is of much importance in the cure of disease. This requires in the first place the use of such means as will excite the secretions, and "restore the inward heat," by which, as Dr. Thomson expresses it, the "canker is ripened," and as these morbid secretions soften, they may be removed by the use of Thomson's "No. 3," or "medicines for canker." The tannin and gallic acid contained in these vegetable preparations, have a strong affinity for the "canker," and by combining with it overcome its tendency to putrefaction, and they also *detach* it from the coats of the stomach, removing obstructions to the secretions, and enable the chyliferous vessels to take up nourishment, and supply a necessary material for the production of *heat*—the main-spring of vital action.

XXV. In violent local determination of blood to a part or organ, as in croup, inflammation of the brain, violent pleurisy, inflammation of the kidneys, apoplexy, &c. one of the most important indications in the treatment is to overcome this undue determination to the diseased part by relaxing the system with lobelia, either by the stomach or administered by injection. The same course of treatment is applicable in profuse hemorrhage, as in bleeding from the lungs, nose, or uterine organs.

XXVI. Finally, Dr. Thomson's System of Practice is adapted to the cure of disease in general; and, if judiciously applied, will effect a cure in all cases that are curable by means of medicine.

HEALTH.

Perfect health may be defined to be that condition in which the principle of life, or vital power, holds supreme and undisturbed control over all the various actions in the body.

DISEASE.

Disease consists in a loss of vital power, or a weakened condition of the principle of life.

Symptoms do not constitute disease. They are the immediate consequences of diminished vital power; or they may arise from the restoring efforts of the constitution. Thus the first symptoms in disease, as languor and debility, coldness of the surface and chilliness, are the immediate effects of a loss of vital power, whereas when reaction takes place, many of the accompanying symptoms, as fever, pain, inflammation, vomiting, diarrhœa, and convulsions, are the consequence of the vital force resisting the cause of disease.

Of the General Causes of Disease.

Disease is produced by agents or powers which exert an influence upon the system, not *congenial to the vital principle, or which are not in relation with, or adapted to, the laws of life.*

Exposure to cold and dampness; sudden vicissitudes of temperature, more especially when the system is in an exhausted condition; changes in the electric condition of the atmosphere; poisonous effluvia generated by the decomposition of vegetable matter; unwholesome food taken into the stomach; excesses in eating or drinking and in the indulgence of the sexual passions; and specific poisonous agents, such as produce small-pox, measles, and scarlet fever, are the general sources of disease.

Cold and dampness are the most fruitful sources of disease. Their direct effect upon the system is to weaken the vital power, and consequently diminish and subvert the healthy order of action in the system, and whatever organ or part of the body is weakest proportionably to its natural degree of vitality, that will be the part most likely to become diseased. Hence of any number of persons exposed to cold and dampness, each may have a different form of disease. Thus one may have a pleurisy, another rheumatism, a third a simple catarrh, a fourth bronchitis, a fifth quinsy, a sixth neuralgia, a seventh sick headach, whilst another may be taken with bilious fever, and another with erysipelas. In this way almost every variety of disease may be brought on by the same cause

Exposure to sudden changes of temperature, more especially from heat to cold when the system is exhausted from exercise, or the vital forces, otherwise enfeebled, may give rise also to a variety of forms of disease.

Marsh miasmata.—The poisonous effluvia, or vapour, arising from decomposition of vegetable matter, together with cold and dampness, are believed to be the principal causes of the fevers that prevail during the latter part of summer, and in autumn, more

particularly in low marshy districts of country. It is certainly true that fevers prevail most in marshy places and near ponds of stagnant water. Newly cleared land evidently gives rise also to noxious vapours, from the decomposition that ensues on the exposure of the fresh earth to the sun. This will account for the prevalence of disease in newly settled places.

The first effect of this miasmata upon the system is to weaken the vital powers; the strength becomes enfeebled; the appetite fails; there are languor, chilliness and aching pains; precisely such symptoms as might be produced by exposure to cold and dampness. These symptoms are the direct consequences of the poisonous effluvia weakening vitality, and as the constitution rallies to expel the poison, fever is produced.

The greater part of medicines employed in the regular practice, have no relation to the laws of life, but are repugnant to Nature, and injurious to the constitution. Such agents will modify symptoms, or change the form of disease, but often, where a cure is effected, it is the result of the sanative efforts of the constitution, in spite of medicine.

Arsenic is often given in intermitting fever, and though it will stop the chill and fever, it establishes a permanent disease in the mucous membrane of the stomach and bowels, and thus produces chronic dyspepsia, attended by a swollen abdomen, which is seldom removed under a year, and sometimes terminating in dropsical affections.

FEVER.

Fever is the effort of the vital powers to overcome disease, or a method established by *nature* to resist the causes of disease, and to expel from the system whatever is offensive or injurious. Hence most of the symptoms in acute disease are but the recuperative actions resisting the force of disease. Every variety of disease attended by fever, comes on with the same general symptoms. Thus pleurisy, bilious fever, small-pox, scarlet fever, measles, dysentery, and every other form of acute disease, begin with languor, loss of appetite, and general coldness. This is the first change from the healthy state: a diminution of vital heat, and nervous power. The blood recedes from the surface, and nature in exercising her power of resistance to disease occasions fever.

"Fever and *reaction in excess*, are," says professor Jackson, "precisely the same; they are properly symptoms rather than disease; they are salutary and sanative in design; they are the evidences of power and force which admit of remediate and curative operations; and they are in themselves the recuperative processes of the economy in action, instituted for its preservation." Therefore the "*design of nature in disease should be studied and aided.*"

Dr. Samuel Thomson in his "remarks on fevers" says—"What is commonly called fever, is the effect and not the cause of disease. It is the struggle of nature to throw off disease. The cold causes an obtruction, and fever arises to remove it. This is universally the case. *Remove the cause and the effect will cease.*"

This theory of fever advanced by Dr. Thomson, and doubtless original with him, was maintained by Hypocrates, Sylvius and others of the early writers on medicine. But the failure of their practice arose from the employment of remedies which tended to *aggravate* rather than *assist* the efforts of nature. The medical faculty have never made the proper distinction between *pure* stimulants, which raise and support vital action, and those which *provoke* an unnatural action, and ultimately exhaust the strength. It is to Samuel Thomson we are indebted for the discovery and selection of medicines which harmonize with the laws of life, and if judiciously applied, are adapted to the cure of every variety of disease.

"Again," says Dr. Thomson, "there is no other difference in all cases of fever, than what is caused by the different degrees of cold, or loss of inward heat, which (meaning cold and heat) are two adverse parties in one body contending for power. If the heat gains the victory, the cold will be disinherited, and health will be restored; but on the other hand, if cold gains the ascendency, heat will be dispossessed of its empire, and death will follow of course." * * * * * "When the power of cold is nearly equal to that of heat, the fever or strife between the two parties may continue, and occasion what is called a continued fever. In ague and fever, the strife between the cold and heat occurs periodically, in some instances, every day, in others every second, and sometimes every third day." "In attempting to cure a case of this kind," says Thomson, "we must consider whether the fever is a friend or an enemy; if it is a friend, which I hold to be the fact, it should be aided by increasing the power of heat internally, and thus assist in driving out the cold, and life will bear rule." In alluding to the practice of regular physicians in fever, Thomson says, "Instead of following the dictates of nature and aiding to subdue the cold, the doctor uses all his skill to *kill* the fever." * * * * "Support the fever and it will return inside where the heat belongs; the cold which causes the disease will be driven out, and health will be restored. In all cases of fever the cause is the same in a greater or less degree, and requires one general plan of treatment. Cold causes canker (a morbid secretion) in the stomach and bowels, and before the canker becomes seated, the hot medicine alone, assisted by the vapour bath, will throw it off. When the fever becomes settled, or continues to return, it is evidence of

seated canker in the stomach and bowels. If the inward heat be kept up, the canker will ripen and come off, and then there will be no more fever." "This idea is new," says Dr. Thomson, "and was not known until my discovery."

"When a patient is bled," says Dr. Thomson, "it lessens the heat and gives double power to the cold; like taking out of one side of the scale and putting it into the other, which doubles the weight, and turns the scale in favour of the disease. By giving opium, the feelings are deadened; the use of antimony, calomel and nitre, tends to destroy what heat remains, or more properly destroys the power in the system of producing heat.

"When a person is taken sick it is common to say, I have got a cold, and fear I shall have a fever; but no fears are expressed about the cold he has taken; neither is it mentioned when the cold left him. The fashionable practice when the fever rises is to destroy the heat, and the same means which they often use to cure the sick, would destroy the health of a well person. How much more reasonable it is when the fever rises to help it to throw off the cold which caused the disease."

The means recommended by Dr. Thomson for "raising the heat of the system," and for "keeping the inward above the outward heat," are the same that are required to sustain the generation of the nervous power necessary to maintain a proper balance in the circulation of the blood, and to sustain the curative life-preserving actions in resisting the various causes of disease.

In tracing the progress of fever to a favourable crisis, we find it terminating in a restoration of the secretions, and by establishing some critical evacuation, more particularly by sweat and urine. This fact points out the design of nature in establishing fever or reaction. Thus in every case of acute disease which terminates favourably, we find a general warm perspiration, and an increased secretion of urine depositing a brick-dust sediment, constituting almost invariably the more prominent crisis symptoms. The plan of treatment established by Dr. Thomson will assist the constitutional efforts in bringing about a crisis in disease, and without in the least degree aggravating the fever, but, on the contrary, at the same time that it aids its efforts, will generally moderate the violence of its symptoms. But take a case of remitting fever where the symptoms are all favourable, bleed this patient every day, purge with active cathartics, give him ice water to drink, and pursue this course for a week, and in nine cases out of ten the fever would at the end of this time assume a malignant type, when it would have formed a crisis and the patient been convalescent if the restorative actions were not interfered with.

It is by reaction that the organization is sustained against *all*

debilitating causes. Thus if a person in health be bled to fainting, reaction will follow, and the system may be brought into the same excited condition for which blood-letting is frequently employed; and the subsequent disturbance in the system will generally be greater in proportion as the vital powers are depressed by the loss of blood. I have heard Dr. Parrish relate a case of a man who had been for a length of time subject to frequent losses of blood from piles, and subsequently underwent an operation, by which he lost a large quantity of blood. This, a few days after the operation, threw the system into a state of tumultuous excitement, the face red, eyes sparkling, with a full bounding pulse, and the carotid arteries throbbing very strongly, and, as the doctor stated, the patient exhibited symptoms, which every surgeon would have said demanded bleeding, when at the same time the patient was drained of almost all his blood, and the constitution was struggling against the effects of its loss. Not many months since, one of the physicians to the Blockley Hospital, a man of extensive experience, having been fourteen years in practice, on examining a patient in one of the wards, inquired of one of the house physicians why that patient had not been bled, and immediately directed a pint of blood to be drawn. The doctor was informed, however, that this patient had a surgical operation performed a few days previous, and that secondary hemorrhage had taken place, and the patient had been already nearly bled to death.

Dr. Dunglison in a lecture mentioned the case of a patient in the hospital who was at sea a length of time without solid food, and labouring under great excitement, the doctor ordered him to be bled, but found that the blood was impoverished and almost deprived of its red globules, and that a different course of treatment was necessary, that the excited state of the nervous system arose from this impoverished state of the blood, requiring stimulants and generous diet.

A frequent abstraction of blood may produce a determination to the brain, and the arterial system be thrown into a state of great excitement, presenting the same symptoms, which according to the doctrines of the schools of medicine, require the use of the lancet; the loss of blood being at the same time the sole cause of the excitement; the constitution reacting against the morbid effects of the loss of blood. How often does inflammation of the brain ensue in remitting fever, and the disease become of a malignant character, produced either by bleeding or purging, or by both, reducing vitality so low that nature is driven to rally all her powers to "*save a wreck:*" the clashing forces struggle for the ascendency which too often is decided in favour of the foe to life, aided probably by the college skill of the doctor, who errs, yet undesignedly.

Excessive loss of blood is not always followed, however, by reaction; in some instances the system remains in a state of debility, accompanied by some chronic disorder, as dyspepsia, liver complaint, consumption, dropsy, &c.

The doctrine that *fever* is *disease*, has given rise to the plan of treatment adopted by the *regularly educated physicians.* They aim to subdue vital force, considering the fever as an exalted condition of vital action which requires to be reduced by sedative agents, which tend to destroy the vital principle; as nitre, antimony, neutral salts, &c., together with blood-letting. This plan of treatment though sustained by the authority of great names, and by *law* and *fashion*, will probably be viewed by future generations as having been fraught with glaring inconsistency, and which must necessarily have been attended with disasterous consequences. Such, however, is the force of education that great minds may imbibe errors which are easily seen and detected by the unscientific. A patient may be brought to "death's door" by the treatment instituted to cure him, and be kept ill for months, and at the same time the physician gets great praise for his skill; the known liability to be ill from other causes, renders it difficult to determine as to the effects of the treatment. An article that operates as a poison in a healthy state of the system, operates as a poison in a diseased condition of the system; but the deleterious effects of antimony, nitre, mercurial preparations, active cathartics cannot be detected during disease, as in a healthy condition of the system. For instance, if a healthy person take any of these articles in the quantity generally prescribed in sickness, and continue for some time, the digestive functions will be disordered, and vital action will be weakened; whereas in disease it is difficult to detect the evil consequences of deleterious medicine, for the functions being already disordered, the patient may be *kept sick* for months by bad treatment, without the cause of the continuance of disease being discovered.

The cause of disease may be so powerful that the reaction or fever cannot accomplish its design of establishing some critical evacuation, the vital powers being exhausted in the struggle. Thus yellow fever has been defined by Dr. Whytt, of Edinburgh, "That fever which continues two or three days, and then terminates without any critical discharge, by sweat, urine, or stool, &c., leaving the patient excessively weak, with a small pulse, easily depressible by any little motion, or by an erect posture; and which is soon succeeded by a jaundice colour in the whites of the eyes and skin, vomiting, hemorrhage, &c., without any fever.

In that form of disease called typhus fever, the principle of life is reduced below the point of healthy or efficient reaction; the

power of the cause of disease prostrating the energies of life, and the reaction assumes a low malignant grade of fever. Remitting fever is sometimes converted into typhus fever, by blood-letting and purging, or from exposure to cold and dampness; food taken into the stomach which it cannot digest, has in frequent instances caused a fever to assume a malignant character, for as the action of the stomach is lost, or its energies oppressed, the vital powers sink accordingly.

Fever being the "friend," it may be asked, is a violent fever more favourable than one that is of a milder character? To this it may be replied. *If the cause of disease be powerful, the reaction will require to be proportionably strong to oppose its influence*, and therefore, other circumstances being equal, when the cause of disease is powerful, A high fever is more favourable.

If the vital powers be too feeble to establish an efficient reaction against a powerful cause, the fever will not be of a mild, but of a low, malignant, or typhus grade.

If the cause of disease be weak, and the vital energies strong, the fever will be of a mild character, and soon form a crisis, as in ordinary chill and fever.

Though the force of disease be weak, but the general health much impaired, reaction may be imperfect and the disease partake of a malignant character.

Where the force of disease is powerful and the vital powers are in a depressed condition, the reaction may commence with a violent tumultuous excitement of fever, but the power of vital resistance, being too feeble to maintain reaction, these symptoms will be soon followed by great prostration and sinking of the vital forces. Thus yellow fever, malignant cases of scarlet fever, small-pox, pleurisy &c., are sometimes attended by violent fever in the early stage of the disease, but the power of vital resistance being soon prostrated, the patient sinks into a state of stupor, termed a typhoid or congestive condition.

The recuperative or restorative design of *fever* is manifest in the eruptive diseases, as small-pox, scarlatina and measles. Beginning with a disordered stomach, which is the seat of the disease, the constitution reacts with the design of throwing the disease to the surface, and when this is accomplished, the distress of the stomach is relieved. Patients have died of these diseases without the eruption appearing; the violence of the cause of disease prostrating the nervous energy, and suspending the function of calori-

fication ; the patient remaining cold and stupified as if stunned by a blow, or if there be fever it will be of a low typhoid character. In all such cases prompt measures should be instituted in order to excite reaction, the only way by which the disease can be expelled. The plan recommended by Dr. Thomson is to lighten the air around the patient by the judicious application of warmth and moisture, and to give the most active stimulants, as the third preparation of lobelia, with a view to rouse the stomach from its state of torpor, and to evacuate its foul contents, which in most instances occasions its oppression, and the consequent depression of the nervous energy. There are no means so efficient in bringing on reaction, as an emetic of the third preparation of lobelia and the application of warm vapour around the patient.

Had those earlier writers and teachers of medicine who proclaimed doctrines similar to those of Samuel Thomson in relation to fever, been fortunate enough to have discovered the proper means of assisting the efforts of nature, instead of resorting to the use of wine, brandy and other alcoholic preparations as stimulants, the practice of medicine would long since have been established upon a firm and unchangeable basis. But the injurious effects arising from the employment of such stimulants, induced them to change the theory, although nature proclaimed its truth in language too plain to be misunderstood. Hence for the want of a knowledge of the proper means to effect the indications which this theory pointed out, namely ; *to assist Nature*, the doctrines and practice of medicine have been as changeable as the fashions in dress. "The history of practical medicine," says Dr. Eberle, "consists of little else than a review of the various doctrines which have successively risen and sunk again concerning the nature and treatment of *fever*."

Medical men, since the days of Hypocrates, have been inventing new theories in medicine, and then exert all their ingenuity to make facts sustain the theory. Thomson, adopting the rule laid down by the great Beacon, founded his *theory* upon *facts*, and pursuing a correct method of investigating the relation existing between effects and causes, he arrived at a knowledge of those first principles, which constitute the basis of medical science.

The first principles of medicine once established, and the proper means and remedies discovered for fulfilling the general indications of treatment, the practice of medicine must be simple, plain, and unchanging.

PRACTICE OF MEDICINE.

CHAPTER I.

SECTION I.

INTERMITTING FEVER—AGUE AND FEVER.

The general causes of Ague.—Noxious or poisonous vapours in the air, called *Malaria* or *Marsh Miasmata*, arising from the decay and decomposition of vegetable matter in marshes, and from grounds inundated and then drained. The drying of mud from ponds that have been drained, the decomposition of vegetables, as flax, hemp and potatoes. Newly cleared land is supposed to give rise to deleterious exhalations from the decomposition produced by the exposure of the fresh earth to the sun. Cold and dampness are frequently the *exciting* cause of the disease.

The same cause or combination of causes that produce ague in one may cause dysentery in another, jaundice in another, and in another neuralgia. And then again one possessed of a good constitution, and who is in vigorous health, may be exposed to the same causes of disease without being affected. The more perfect and active the digestive functions the less will be the liability to disease.

Symptoms and general course of Intermitting Fever.—The first symptoms presented in this form of disease are such as occur in the initial or forming stage of every variety of disease attended with fever, namely: general debility, loss of appetite, more or less distress at the pit of the stomach, obstructed perspiration, restlessness and langour, aching in the back and limbs, and increased sensibility to cold.

The cold stage or chill.—The chill comes on with creeps along the back, and an irresistible desire to yawn and stretch. There is a general coldness and contracted state of the skin, presenting that rough appearance called goose-flesh, and a sensation down the back as from trickling of cold water; the mind is confused and

dejected, the pulse is small, contracted, frequent and firm. The jaws begin to quiver or chatter, and a general shivering takes place over the whole body; sometimes these rigors are so violent as to shake not only the bed, but even the floor and partition. The breathing is hurried, and sometimes accompanied with a hacking cough, and a feeling of stricture across the breast. Vomiting is not an unusual occurrence, more particularly about the termination of the chill. The secretions of the mouth are suspended occasioning urgent thirst. The urine in this stage "is clear, colourless, without sediment, and often copious." The chill in some instances continues but a few minutes, and in others for several hours. Sooner or later reaction commences, and the patient experiences flashes of heat through the body, which increase until the chill is entirely gone and the fever becomes fully developed; distressing vomiting often occurs at this period.

The reaction or hot stage.—The blood which during the chill was confined to the internal organs and vessels, when reacti on takes place is attracted to the surface: the countenance becomes flushed and the skin dry and hot; the pulse rises and becomes full and strong; the mind becomes more active, with a rapid flow of ideas; there is pain in the head, back and extremities, and not unfrequently more or less delirium, or, as it is commonly expressed, the patient is "light-headed." The urine is scanty, and high-coloured, but without sediment. The duration of the fever varies in different cases, but finally effects a crisis by a restoration of the secretions from the skin and kidneys, and thus terminating in

The sweating stage or crisis.—As perspiration takes place the breathing becomes less difficult; the pulse softens, and a general abatement of all the distressing symptoms takes place as the perspiration becomes general and free. The urine is high-coloured and deposits a reddish sediment on standing. As the sweating continues the symptoms of disease continue to lessen until finally the patient is apparently free of disease.

These stages, viz: the cold, the hot and the sweating stage, form what is termed a *paroxysm* of intermitting fever. These paroxysms occur periodically, either every day, every other day, or once in three days, and generally about the same hour of the day.

During the intermission or interval between the paroxysms, the patient will in some instances be entirely free from all unpleasant symptoms, except debility; more frequently, however, the patient experiences a considerable degree of indisposition, with loss of appetite, costive bowels, furred tongue, and much weakness.

Intermitting fever, like every other form of disease, is subject to various modifications, depending upon the circumstances under

which the disease occurs, in relation to the condition of the patient, and various other causes which may tend to modify the disease. Thus, if the disease be connected with a torpid state of the liver, the skin and whites of the eyes will be yellow, and it will be said the patient is *bilious*, or that he has a "*bilious intermittent.*"

When the disease attacks persons of shattered and exhausted constitution, the efforts of nature or the vital powers may be too feeble to establish an efficient reaction, forming what is called *congestive intermittent.* The cold stage will be unusually long, with stupor and deep seated pain in the head; vertigo, faintness and great oppression across the chest. The fever will be very slow in coming on, the skin being scarcely warm, and the patient will continue greatly oppressed, with a pale countenance and great oppression and anxiety of breathing; the pulse will be small, quick, and tense, and a distressed and burning sensation inwardly.

Autumnal intermittents are apt to be connected with extensive derangement of the stomach, liver, and bowels, designated by writers as *gastric intermittents.*

Signs which distinguish ague and fever from hectic fever.

I. In hectic fever there is an absence of the distress in the back and limbs, which attends a paroxysm of intermittent fever.

II. Hectic fever occurs at irregular periods; whereas in intermitting fever the paroxysms come on at regular periods, seldom varying more than an hour earlier or later than the preceding paroxysm.

III. In hectic fever the hot stage is attended with a circumscribed flush on one or both cheeks; without pain in the head, which is a most distressing symptom in ague.

IV. The pulse in hectic fever instead of being moderated by the subsidence of the paroxysm remains quick.

V. The tongue which is furred in *ague* is clean, and smooth in *hectic.*

VI. In hectic fever the urine is muddy during the paroxysm, and clear after. In ague it is muddy or turbid after a paroxysm.

VII. The mind is full of hope and confidence in hectic, and desponding in intermittent fever.

Intermitting fever very seldom proves fatal except where it occurs in broken-down constitutions, or when complicated with extensive

derangement of some important organ. In low marshy districts of country the disease is apt to become chronic, from the continued exposure to the cause; the countenance is sallow, the abdomen distended, and the spirits sunken and dejected.

Favourable signs.—Each succeeding paroxysm occurring at a later period, scabby eruptions about the mouth and nostrils, cleaning of the tongue and restoration of the natural secretions of the skin and mucous membranes, and an improvement in the appetite, indicate a favourable termination of the disease.

It frequently happens that an unusually severe paroxysm, without there being any assignable cause, terminates the disease, the patient becoming convalescent.

Intermittent fever has its seat in the stomach and bowels, and subsequently other organs become affected, more especially the liver. An inactive or torpid condition of the liver is doubtless a frequent cause of the disease becoming chronic. In such cases the skin and whites of the eyes become sallow, the abdomen swollen and the spirits sunken and dejected, and the disease proves difficult of cure.

Treatment.—The indications of treatment are to cleanse the stomach and bowels, together with other means for aiding nature in her efforts to remove obstructions, establish a natural action throughout the system, sustain the nervous energy and restore digestion.

Thomson's course of medicine by its prompt action upon the stomach, bowels and skin, and by the fresh impulse given to the circulation and the secretions, will prove the most effectual method of curing intermitting and all other varieties of fever. A very effectual plan is to commence with a course of medicine an hour or two before the time at which the chill comes on. In ordinary cases where the paroxysms occur every other day the course of medicine will seldom require to be repeated more than two or three times to effect a cure, provided a proper intermediate course of treatment be pursued.

Treatment during the paroxysm.—1st. Of the *cold stage.*—During the chill the patient should drink hot teas, as composition, cayenne, or pennyroyal, and be placed in a vapour bath, or be covered warm in bed, and hot bricks or jugs of hot water placed at the feet and back, and third preparation of lobelia, tincture of capsicum, or some stimulating liniment rubbed along the spine. This will assist to bring on reaction and overcome the chill.

Where the vital powers are in an exhausted condition, and insufficient to establish reaction, constituting what is termed *conges-*

tive intermittent, an emetic of the third preparation of lobelia should be given to relieve the stomach of its foul contents and to arouse its sunken energies; and external warmth be applied around the patient. After free vomiting the system will generally react, but if it should not the medicine must be continued, and the same administered by injection to the bowels, together with mustard plasters to the stomach, wrists and ankles. In some rare cases fatal congestion has taken place during the cold stage, for want of power in the system to produce reaction. The most effectual means for bringing on reaction and of relieving internal congestion are the application of the vapour bath and the free use of the third preparation of lobelia.

Treatment during the hot stage.—When the fever comes on all dry heat may be removed from around the patient, but the hot medicine will be proper with a view to aid the reaction to bring on a crisis by perspiration. Where the fever is of a violent character and the patient greatly distressed, an emetic should be given, and the patient kept relaxed by broken doses of lobelia, given either alone or in the stimulating teas, and bathe the surface with whiskey, vinegar, sal æratus water or simple water. Where the thirst is urgent, the patient craving cold drinks, they may be allowed him in small quantities. A draught of cold water will in some instances cause perspiration in the latter period of the hot stage. Acidulated drinks, as lemonade, are very grateful to patients, and may be taken in moderate quantities. The thirst, however, arising from suspended secretion of the mucous membrane of the mouth and throat will be more effectually relieved by capsicum tea than by cold drinks. Simple herb teas, as mint, ditany, pennyroyal and balm, are proper in any stage of the disease. Bathing the surface with spirits or vinegar when the fever is violent affords relief to the patient. Hot bricks wrapped in cloths wet with vinegar, will in some instances afford relief even during the fever.

When the sweating stage comes on, all cold drinks are inadmissible. The patient should keep in bed and take hot medicine to favour and continue the perspiration. When the perspiration ceases the body and limbs should be bathed with Thompson's No. 6, and dry warm clothing put on. Much benefit may be derived by the use of the vapour bath at this period.

Treatment during the intermission.—The treatment during the interval between the paroxysms is to be regulated according to the circumstances of the case, and the condition of the patient. Thus in the first stage of the disease pure stimulants, as cayenne and composition, should be used with a view of sustaining the strength and aid in restoring the secretions. The compound lobelia pills

answer the place of the teas, two or three of which may be taken every hour or two.

Indications for the use of tonics.—When there is a complete intermission of fever between the paroxysms, and the tongue begins to clean, and assume a more natural appearance, tonics will come in play.

Peruvian bark.—This is probably the most effectual tonic in intermitting fever, and given at a proper time, or under certain conditions of the system, no bad consequences probably would ever arise from its use, even in large doses.

The advocates of Homeopathy in proof of their theory, assert that Peruvian bark continued to be taken by a person in health will produce a disease resembling intermitting fever. In certain conditions of the stomach, for instance where there is a redundancy of acid or the secretions otherwise deranged, Peruvian bark or other astringents, as hemlock and marsh rosemary, may produce a sense of oppression and constriction at the stomach, and even occasion intermitting fever. Peruvian bark, however, will not disorder a healthy stomach, nor will it produce intermitting fever, except under peculiar circumstances.

In preparing Peruvian bark I usually combine it with a portion of Virginia snake root and orange peel, or with spice bitters, and give in the form of a decoction. It may also be prepared in tincture, or taken in good wine, as Madeira, or Sherry. Barks are also frequently taken in substance mixed with some kind of liquid, such as milk, coffee, cinnamon water, clove tea, cider, brandy and water, or simple water. The barks may be taken in teaspoonful doses, and these repeated several times a day when there is absence of fever; or take from half to an ounce of the bark an hour or two previously to the time at which the chill is expected. When there is much acidity of the stomach a portion of sal æratus, or sup. carb. soda should be combined with the barks. This as well as other tonics may be administered by injection with the same benefit as when swallowed, provided the injection be retained.

Quinine pills.—Pills composed of equal parts of quinine and capsicum, form a substitute for barks and all other tonics; and on account of the facility with which the pills are taken, they are generally preferred to any other preparation. Quinine contains the active principle of the Peruvian bark. I cannot discover any objection to its use in a proper state of the stomach. A few hours before the period at which the chill comes on, the quinine or whatever tonic is used, should be given freely; when the patient is taking quinine, it will be proper to omit the use of bayberry and all other vegetable astringents.

A great variety of tonics have been employed for ague, which answer in many cases equally as well probably as the *Peruvian bark* and its *preparations*, such as Thomson's No. 4 bitters, various species of the poplar and willow, the broad-leafed dog wood bark, wild cherry bark, columbo, gentian, quassia, Virginia snake root, and thoroughwort or bonesett.

Before resorting to the use of tonics attention must be paid, as before mentioned, to the condition of the stomach, and not employ them whilst the tongue is dry and exhibits no tendency to clean at the edges. Neither should they be used so long as there is a feverish condition during the interval between the paroxysm.

Relapses are liable to occur if the patient be exposed to the exciting cause.

Precautions.—Avoid cold and dampness; dress warmly, and never go out in the morning or evening with an empty stomach. If the patient resides in a marshy district he should continue the use of tonics in order to invigorate the system.

The cold shower bath may also be used as a preventive, where there is no particular organic disease, as an enlargement of the spleen or liver.

The plan adopted by some practitioners and which generally proves successful in preventing a relapse, is to give the patient for instance half an ounce of Peruvian bark or eight or ten quinine pills, about the seventh day after the last chill, and then at the end of the next seven days give a less quantity, and in this way continue giving the tonic, every seventh day lessening the quantity each time.

If there are symptoms indicating a return of the disease, the patient should go to bed, cover warm and take freely of composition or of capsicum tea, or what is better go through a course of medicine.

SECTION II.

REMITTING OR BILIOUS FEVER.

A continuance of the fever to a greater or less degree during the interval between the paroxysms, constitutes the principal distinction between remitting and intermitting fever: in the latter the reaction effecting a crisis terminates the fever, and which disappears until the succeeding paroxysm; but where the efforts of the

constitution are insufficient to effect a crisis, the contest continues and the fever is prolonged, constituting *remitting* fever.

Causes.—Remitting or bilious fever is produced by the same cause or combination of causes as intermitting fever, such as marsh effluvia, exposure to high atmospheric heat when the powers of the stomach are feeble and the "internal heat" and nervous power are insufficient to maintain a proper balance in the circulation and determination to and from the surface; wearing damp clothes, errors in diet, exposure to wet and cold, depressing passions, &c. Persons who attend upon the sick, especially in cases of malignant disease, by being exposed to the deleterious exhalations from the sick, together with the loss of their natural rest, and the confined air in the sick room, are liable to be taken sick, and frequently it happens that they will have the same form of disease as the patient on whom they had attended. Hence it often occurs that where one member of a family is taken sick with a "bad fever" as it is called, other members of the family are subsequently taken down with the same form of disease.

Symptoms.—The first symptoms resemble those that usually occur in the first stage of intermitting fever, namely: langour and heaviness, yawning and heavy sighing, loss of appetite and distress at the pit of the stomach, pain in the head, back and limbs, alternate sensations of heat and cold, followed by a chill or by horripilations and langour.

As reaction takes place and the fever rises, the pains in the head, back and limbs are increased. There is much distress at the pit of the stomach, with a total disgust for food, nausea, retching and vomiting sometimes of bilious matter, at others of a glairy mucus without bile; the tongue is thickly furred; the whites of the eyes become yellow, and the skin of a yellowish or sickly mixture of red and yellow; digestion is lost, and the bowels torpid or very seldom moved; the stools are unnatural, generally either clay coloured, or much darker than natural; the breathing is more or less oppressed, and a sense of tightness or stricture across the chest; the urine is scanty and high coloured; the pulse full, frequent, but seldom very hard or tense, and the skin is generally dry and hot."

"These symptoms continue until the succeeding morning, when a gentle perspiration appears on the superior portions of the body and sometimes over the whole surface. The fever now abates, but a crisis is not effected, and the fever consequently does not entirely disappear, at least but for a limited period; the pulse continuing quick and irritated, and the skin is above its natural temperature. Usually in the course of an hour or two, the fever again rises, and continues as during the preceding day and night, and then abates for a short time in the morning, and in this way the

struggle between the vital powers and the cause of disease continues until a crisis takes place, and the patient becomes convalescent; or the disease assumes a more malignant character by the vital energies becoming exhausted, in the struggle. There is, however, great diversity in the symptoms and character of what is termed *remitting* or *bilious fever*, scarcely ever two cases presenting precisely the same aspects or regular train of symptoms. Thus in one the liver may be more disordered, and this will modify the symptoms; in another the liver may be less and the stomach more deranged, and the symptoms will be modified accordingly. The degree of loss of vital force tends to modify the symptoms to a great extent.

In most instances of remitting fever the symptoms are worse on every alternate day.

In some cases the remissions or declining of the fever occurs soon after daylight, in others after the sun is up, and in others not until noon or after. Great variations also occur in relation to the degree and duration of the remissions. In some the fever will almost or entirely disappear for an hour or two, or even for three or four hours, whilst in other cases the fever is so slightly moderated as scarcely to be noticed by the patient or attendants. In some rare cases the remissions are observed to occur in the evening or during some part of the night. These irregularities are observed particularly in the fevers that prevail in the spring and during the hot summer months.

The disease continuing beyond the fifth or sixth day without forming a crisis or assuming a milder aspect, the vital powers will begin to give way, and, if it continues unchecked over the ninth day or second week, the symptoms are very liable to assume a more aggravated and sometimes dangerous character. Seated originally in the stomach, which may be very properly termed the "throne of life," as the functions of this organ are impaired and its energies weakened, so in proportion will other organs, such as the brain, liver, &c., become disordered, and the vital powers be prostrated. The tongue becomes more thickly coated with brown fur, "delirium occurs more frequently and strongly; the skin acquires a more deeper tinge of yellow;" the bowels become tender to pressure, and distended with flatus; there is frequently an acrid heat on the surface, and a burning pain in the stomach and bowels, probably from the presence of vitiated acrid secretions; and in frequent instances there are offensive discharges from the bowels; almost continued restlessness and inability to sleep.

In some instances the liver is prominently affected, losing entirely the power of secreting bile, and in a state of congestion, causing a sense of great fulness and pain in the right side; violent retching and vomiting, "*without the ejection of bile, the matter thrown up consisting of glairy mucus*," together with what may have been

taken into the stomach. There is great torpor of the bowels; the tongue *clean*, or seldom remains furred but for a short time, beginning to clean along the *middle;* and *towards the termination* of the disease a *copious* discharge from the bowels of a dark pitch-like matter. "The liver frequently recovers its action and relieves itself by pouring a large quantity of black bile, or perhaps blood, into the bowels, as is manifested by the copious, dark coloured or tar-like alvine discharges, which usually occur in such cases. These large and very peculiar discharges, may indeed be regarded as the favourable *crisis* of such fevers as prevail during hot weather, for convalescence generally soon follows their appearance, and except the disease be arrested by remediate treatment in the early period of its course, there are but few recoveries in which such discharges do not occur." In this as in all other forms of fever the stomach is doubtless the original seat of the disease, the loss of action in the *liver* being a consequence of loss of power in the stomach. The symptoms accompanying remitting fever present an almost infinite variety of modifications, but which it would be useless to attempt to describe, as the disease in all its diversity of character requires to be treated upon the same general principles.

Favourable signs.—A general perspiration with a warm skin; a soft pulse; the appearance of scabby eruptions about the mouth; the urine depositing a copious sediment; the nervous system maintaining its integrity; and the tongue moist and beginning to clean along its edges.

Unfavourable symptoms.—Low muttering delirium; a tympanitic state of the abdomen; involuntary offensive discharges from the bowels; a very diminished secretion of urine; the tongue soft and relaxed, possessing no elasticity; hiccough; the skin relaxed and inelastic, by pinching it up it returns to its natural position very slowly; cold wrists and hot hands, and the breath and perspiration having a peculiar death-like odour. Where there is a chain of these bad symptoms existing, the case may be considered as almost hopeless. Still recoveries do occasionally take place where many of these symptoms have existed. I have known patients recover in whom there was at the same time continued low muttering delirium, involuntary discharges from the bowels, tympanitic state of the abdomen, hiccough, twitchings of the tendons, picking of the bed clothes, deep heavy sighing, and cold sweats over the face and breast. It frequently happens that a patient has a symptom which is considered as indicating great danger, hiccough for instance, but when unconnected with other bad symptoms, this nor any other single symptom is to be considered as a necessary cause of alarm.

Treatment of bilious remitting fever.—A prompt and persevering course of treatment should be instituted in the early stage of the disease, with a view to cut short its course, and thus prevent the disease extending to other organs than those primarily affected.

Thomson's course of medicine constitute the most effectual means not only for hastening the *crisis*, but for relieving the symptoms. The *course of medicine* should be repeated daily in the first stage of the complaint, or at longer or shorter intervals as the case appears to require. Where there is violent pain in the head with a high fever, it will be proper to commence the *course* by an enema, containing a portion of lobelia. One or two teaspoonsfull of lobelia powder administered in this way in lukewarm water, and retained fifteen or twenty minutes, will not only relax the system, but in most instances will answer the place of an emetic given in the usual way. This method of producing relaxation is very effectual, and is of the first importance in the treatment of acute disease when the arterial system is struggling hard to overcome obstructions to the circulation of the blood, and it also tends to equalize the nervous influence, and aids in restoring the secretions. Whenever the system is relaxed by lobelia, and the patient becomes restless, or complains of the external heat, and the breathing oppressed, the face, breast, and hands, should be bathed with vinegar and water, spirits, or camphor and water; this affords great relief to the patient: the external covering should not be so great as to oppress or distress the patient. There are, however, no bad consequences to be apprehended from an emetic given in the usual way, even where there is a violent determination of blood to the head, the symptoms being in almost every instance relieved by the vomiting.

During the intervals between the courses of medicine, pure stimulants, as composition or capsicum tea, should be given occasionally, and frequent broken doses of lobelia, either in powder, infusion, tincture or in pills.

When patients prefer taking medicine in the form of pills, the compound lobelia pills may be employed as a general medicine, more especially in the early stage of disease, or until a crisis takes place and tonics are demanded. The more fully the system is placed under the relaxing influence of lobelia, the greater will be the benefit; for as long as there is fever, there is more or less obstruction in the capillary vessels, and by placing the system under the influence of lobelia, it unlocks as it were the obstructed vessels, promotes perspiration and all the secretions, and equalizes the nervous power.

When the fever is very high the face and breast, and even the whole surface may be bathed with cold water, vinegar and water, alcohol, brandy, camphor and water, or sal æratus water. This is

more especially adapted to the early period of the disease, or when the vital powers are sufficiently strong to bear these cold applications to the surface. Bathing the surface with whiskey is perfectly safe however in any stage of the disease, and where the patient is greatly exhausted this will generally afford relief and apparently give strength to the system.

A great variety of teas and preparations for drink may be used in fevers, as pennyroyal, balm, mint, lemonade, apple tea, crust coffee, &c. A tablespoonful of cold water may be frequently taken where the thirst is urgent and the patient desires cold drinks.

Where the brain is much affected the feet should be kept warm and occasionally placed in warm water, containing mustard and salt, or hickory ashes. Injections are of especial benefit under these circumstances in diverting the nervous influence and consequently the blood from the head to the bowels. Not only in this are the enemas beneficial, but they relieve the bowels and aid in restoring their lost function. I have occasionally observed discharges of black vitiated bile evidently from the liver, by relaxation produced from an injection of lobelia, the obstruction in the liver is in this way overcome, and the organ enabled to relieve itself from a state of congestion and oppression.

Further remarks in relation to the course of medicine.

1st. *Of Steaming.*—When the patient is unable to sit up, or the system relaxed by the lobelia injections, the vapour should be applied according to the directions given for steaming in bed; and during the operation, the surface may be sponged with simple cold water, or combined with vinegar or spirits. I have had patients in a vapour bath on a couch or mattress from an hour to an hour and a half at a time, and without proving in the least degree debilitating, but in many instances, by proper attention, grateful and refreshing.

In a case of recovery from one of the worst forms of fever, and when the patient had symptoms which are generally considered as denoting a fatal termination, the patient was steamed in this way every day, for eight or nine days in succession, and with the most marked benefit. Where the heat of the surface is high it will be difficult to excite perspiration even by the vapour, without reducing the heat of the skin by bathing with whiskey or vinegar. When the skin is in a relaxed condition, and the patient subject to profuse perspiration, the surface should be bathed with No. 6 after steaming. The shower bath is proper after steaming, provided the patient is able to sit up during the steaming. A sudden dash of cold water over a patient in fever has been observed to

be followed by perspiration and an improvement in the disease.

2d. *Of the emetic.*—It is always proper to prepare the emetic in bayberry tea, and the stronger the decoction the more effectually will it cleanse the stomach. In the early period of the disease, when the fever is violent, and the tongue dry and parched, the lobelia powder should be steeped in the bayberry tea, adding the nerve powder or scull cap, and then strain, and half a teaspoonful of capsicum added to each dose; or the patient may take the pepper separately in tea. In a later period of the disease, when the strength is greatly exhausted, the third preparation of lobelia may be used, adding a portion of lobelia powder.

The following is a good form.

Two teaspoonsful of the liquid of the third preparation.
One teaspoonful of green or brown lobelia.
And a teacup half or two-thirds full of bayberry tea,

To be sweetened and taken at once, and the same repeated two or three times, or as often as is found necessary.

I frequently give emetics without the application of the vapour bath; thus in low forms of fever, more especially if attended with delirium, I have repeated the emetic three or four times in twenty-four hours without steaming, and continued this treatment for several days in succession, and with the most signal benefit. The propriety of administering the emetic frequently must be judged of by the effect produced.

Stimulants.—There is no better stimulant in cases of fever than African pepper. Mixed with Virginia snake root or ginger, it is less disagreeable to take, and not so apt to produce pain and distress in the stomach. The tea sweetened, to be taken in half teacup full doses every four hours, or a less quantity more frequently.

Injections.—These cannot be administered too often; it is advisable to give one both before and after the emetic. In very bad cases, attended with delirium, and a tympanitic state of the abdomen, I have found it necessary to use a tablespoonful, and even more, of the third preparation of lobelia in each injection, in order to produce a sensible impression upon the bowels.

The second steaming.—It is not in all cases necessary to administer the bath after the emetic: nor should the patient be disturbed so long as he is comfortable and in a perspiration; when this ceases, and the patient becomes uneasy, then it will be proper to give the bath. When the patient can set up he should be

showered with cold water, or washed with vinegar or spirits; if in bed, change the bed clothes and also the clothes of the patient.

After the course, a hot brick or bottle of hot water should be placed at the feet, wrapt in a damp cloth, and if the patient can bear it, have one kept to the stomach. Care is necessary, however, not to oppress and distress the patient with external heat, more especially when there is fever.

When there is great tenderness of the abdomen, flannels wet with No. 6, or pepper sauce should be applied, and also a hot brick to favour perspiration and a proper action in the skin. Hops stewed in vinegar and thickened with ginger, or a poultice composed of two parts of elm powder and one of composition, adding lard to prevent its drying, applied to the abdomen, will prove more beneficial than bathing.

As the tongue becomes moist and manifests a tendency to clean at the edges, the "canker medicine" should be used, in combination with stimulants and tonics. A tea-cup two-thirds full of bayberry tea made very strong, adding a teaspoonful of composition in powder, is one of the most effectual of remedies for scouring the morbid secretions from the coats of the stomach. This or some other form of the bayberry or No. 3, should be given two or three times a-day.

In all malignant forms of disease termed fevers, where there is a strong tendency to putrefaction, No. 3 or bayberry in strong decoction, adding the No. 6 or third preparation of lobelia, are probably the most effectual of all other remedies.

The pepper sauce has also obtained high repute as a medicine in malignant fevers, in consequence probably of its powerfully anticeptic qualities.

Tonics.—As the secretions become restored and the tongue clearing, together with complete cessations of fever, the tonics recommended in the treatment of intermitting fever should be employed. It very frequently happens that remitting terminates in intermitting fever or ague. Badly treated cases of ague are also often converted into remitting fever.

A tea of the Virginia snake root is proper as a drink in any stage of the disease, and at the same time it tends to support the strength. A tea of the scull cap or of the valerian may be used as a nervine. or the powder added to the other medicines.

Diet.—During the early stage of the disease, and until it assumes a favourable aspect, great attention to diet is necessary. When the stomach is unable to digest food, as is the case in the early period of remitting fever, nothing should be allowed the patient but crust coffee, barley-water, elm gruel, &c. Many patients are injured by taking improper articles of food that the stomach cannot digest.

In a more advanced period of the disease, essence of beef, chicken water, and egg soup may be taken, provided they are found to set well on the stomach.

In a sinking state of the system, wine-whey and carbonate of ammonia, or essence of beef, is necessary, to support the system in the way of nourishment.

Relapses of intermittent or remitting fever are much less liable to occur in summer than in autumn and winter. The best preventive probably is quinine, taken in 8 or 10 grain doses about every seventh day.

SECTION III.

TYPHUS, CONGESTIVE, AND YELLOW FEVER,

Designated by medical writers as different and distinct diseases. Typhus, nervous, congestive, spotted, and yellow fever are but various modifications of malignant disease, consisting essentially in great prostration of the living powers or principle of life.

They may arise from the same cause or combination of causes. They also are liable to run into each other as the cause of disease is more or less powerful, or as the vital powers become weaker or stronger. Thus an intermittent may by bad treatment or other depressing influence, become a remittent, and if the liver should be prominently disordered, the disease will receive the name "*bilious remittent.*" By a still further prostration of the vital powers, the disease may assume the congestive or typhus character. Then if nature should gain ascendency over the disease, the symptoms may reassume the remittent type, or the disease terminate in intermittent fever or ague.

In persons of depraved or drunken habits, the recuperative powers are depressed or impaired, consequently under these circumstances, disease is liable to assume a malignant character.

Continued exposure to poisonous effluvia from the decomposition of certain vegetables, or to exhalations from the body of one affected with a malignant disease, as yellow or typhus fever, by degrees, and in an insidious way, may poison the system and prostrate the vital powers so low as to destroy the power of generating heat and nervous influence, and the patient sink into a dangerous state of extreme debility and stupor, which would be called yellow or conjestive fever.

In some instances, from the force of the cause of disease, the vital energies are suddenly overwhelmed or the principle of life destroyed, the system being in a state of complete stupor and

insensibility, as if stunned by a blow upon the head, or poisoned by a large dose of arsenic. Disease of such deadly character seldom occurs, however, in temperate latitudes, being confined principally to certain localities in hot climates. Not that a high temperature occasions the disease, but heat, combined with moisture, gives rise to malaria or other deleterious agents which poison the system. Typhus and congestive fever prevail most during winter, but it very rarely happens that patients die without some degree of reaction occurring, as sometimes happens in particular localities in hot climates.

The following case tends to illustrate the insidious and disguised manner in which disease of the most malignant character sometimes takes hold of the system. A young man of this city, whose health had become impaired by a succession of colds, became subject to bleeding at the nose, which occurred at frequent intervals, during the term of some weeks. In this exhausted state he bailed some offensive water from a cellar that was very damp, and he remained in the cellar for some hours. Soon after this he grew worse, and I was desired to attend him. He was able to walk about the room, though extremely feeble and dull; he would converse, though with considerable hesitation; his skin was of the natural temperature or nearly so, but pale, relaxed, and without elasticity; his tongue was but very slightly coated, scarcely sufficient to change its natural appearance, and the pulse was apparently natural, manifesting no indications of irritation or unnatural excitement. This patient gradually sunk and died in about two weeks, though the most powerful stimulants were used with a view to arouse the energies of the stomach and bring on reaction. There was no sign of fever, except an occasional flush on the cheeks towards the termination of the disease, neither did he complain of pain; and the stomach appeared altogether insensible to the most active stimulants from the commencement. There was a moisture on the skin during nearly the whole period of his illness. There was a peculiar expression of the countenance—a vacant stare, as though the chain of sympathies were broken up, the brain not perceiving what was going on in the system. This peculiar expression of countenance, which might not be noticed by a common observer, together with what is termed the "sardanic laugh," are always alarming.

It has been observed in frequent instances where patients have died suddenly from yellow fever, that no traces of inflammation were discoverable in the stomach by examination after death; precisely as in a case of sudden death from a powerful dose of arsenic, the principle of life being suddenly destroyed, without the occurrence of fever or inflammation.

The character of disease is as much modified probably by the *condition of the system* at the time the patient is exposed to the

exciting cause, as by the power of the cause itself. Thus the same exposure to cold and dampness that would produce high inflammatory fever in one, would cause typhus fever in another; and the greater the loss of power in the stomach the more liable the system will be to malignant forms of disease: And likewise whatever organ is weakest will be the more liable to be especially diseased. Thus, in some, the brain becomes early affected, whilst in others the liver is prominently disordered, and in others again the disease will be chiefly concentrated in the stomach and bowels, which is probably in all cases the original seat of disease called *fevers*.

"I remember with pain," says Dr. Eberle, "the unfortunate lot of an amiable and intelligent friend. He was a man of healthy constitution and fond of indulging in the pleasures of the table. He was seized with simple synochial fever from cold. His physician bled moderately; the fever went on unchecked; he bled again and again daily; after the seventh bleeding there was still too much quickness and tension in the pulse; the lancet was inserted the eighth time, and the patient sunk almost immediately into a state of collapse. Stimulants, both external and internal, the most diffusive and potent, were now diligently applied, but all in vain; he lived but a few hours longer." If this unfortunate patient had not been bled the eighth time, he would probably have recovered in a slow and lingering manner; and if he had been left in the hands of Nature alone, and lost no blood, he most undoubtedly would have become convalescent in a few days from the time he was taken sick.

Typhus Fever.—In the commencement of this form of disease there is usually much distress felt at the pit of the stomach, an entire disgust for food, giddiness or swimming of the head, extreme debility and dejection of spirits for some days before there is any fever. These are called the "premonitory symptoms," they are, however, the direct and immediate consequences of the cause of disease, and are a more aggravated form of the same train of symptoms that occur in the commencement of ordinary "bilious" or "remittent fever."

The premonitory symptoms in typhus fever, usually continue a week and sometimes much longer, when the patient is taken with a chill or rigour, attended frequently with sickness at the stomach and vomiting, confusion in the head and extreme depression of mind. This chilly state continues an indefinite period, varying from six to twelve hours, when symptoms of slight reaction occur, constituting a low malignant grade of fever. In this stage the symptoms do not differ from those which prevail in the more aggravated form of *remitting* or *continued fever*. But when the pow-

ers of the constitution give way the patient sinks into a state of "collapse," when the following train of symptoms are presented, variously modified, however, in different cases, to wit—extreme muscular debility; a weak and frequent pulse; a stunned or stupified condition of the brain, frequently with low muttering delirium; the tongue coated with a brown or black fur or crust; twitching of the muscles of the face; great difficulty of protruding the tongue; "constant recumbance on the back and sliding down towards the foot of the bed from deficient muscular power; difficulty of hearing, and insensibility to surrounding objects; a peculiar biting heat of the skin; hiccough;" a distended state of the abdomen, with tenderness to pressure; the urine pale, and foaming like beer when voided in a vessel; and as the disease advances there is a tendency to diarrhœa, the discharges being acrid and exceedingly offensive; and the stupor increases, from which it is difficult for the patient to be aroused. Typhus fever, as it is termed, varies greatly, however, in regard to violence, and in the different modifications of the symptoms.

Favourable symptoms.—A general moisture over the surface, with a warm skin; the tongue beginning to clean along the edges; the urine depositing a brick-dust sediment; the delirium subsiding, and the patient being able to sleep, are indicative of a favourable termination of the disease. A crisis seldom takes place until the thirteenth or fourteenth day from the commencement of the disease, and frequently not until the end of the third or fourth week. Recoveries from this form of disease are always slow, the patient remaining a remarkable length of time, in a debilitated condition both of body and mind.

Congestive Fever.—This name is applied to those cases in which the force of the cause of disease overwhelms the vital powers to such a degree as to prevent the occurrence of a well developed fever or reaction. The patient sometimes continuing in a state of stupor and extreme prostration as in concussion of the brain by a blow upon the head.

In shattered constitutions, or where patients are exposed to bad air, as on ship board, or in the crowded wards of hospitals and jails, *remitting* fever sometimes assumes the congestive form from prostration of vital energy, the patient remaining in the chill and stupified, with swimming of the eyes, anxious expression of countenance and great debility. It is useless, however, in a practical point of view, to attempt to make a distinction between the different cases of malignant fevers. That which one physician would name typhus, another would call congestive, whilst another equally scientific might consider the case one of a low grade of "*nervous gravior*," and a fourth contend, that the disease is a severe case of remittent.

Congestive Intermittents occur in certain locations in hot climates. The chill becomes greatly protracted, and if reaction comes on, the fever will be of a low malignant or typhoid grade. It has been noticed in those places where malignant intermittents prevail, that a short chill, followed by a vigorous reaction or fever, is favourable; but, on the other hand, a protracted chill, followed by an imperfectly developed fever, is unfavourable.

Yellow Fever.—This form of disease does not differ essentially from the two preceding varieties. It is, however, almost exclusively confined to mercantile towns of warm climates, where there is no regular winter. It is not only confined to cities of warm climates, but even to places near the wharves. The symptoms are sometimes of a violent character in the commencement of the reaction; there is an intensely hot skin, flushed face, the eyes red, extreme headach, tormenting thirst, intolerance of light, pain in the loins and lower extremities, a sense of weight and tension at the pit of the stomach, white, and sometimes clean tongue. Distressing retching and vomiting occurs, the ejections sometimes so acrid as to excoriate the throat. There is a burning heat and tenderness at the pit of the stomach, as though the patient had swallowed some corroding acid. There is extreme restlessness and deep sighing; a hopeless expression of countenance, and frequently delirium.

The fever or reaction seldom continues more than two or three days, when it subsides without any critical evacuation occurring, either by sweat, urine, or stool, leaving the patient extremely exhausted, with a weak and easily compressible pulse, and soon followed with yellowness of the skin and whites of the eyes. "The patient now remains in a state of tranquil indifference, amounting to a sort of stupor, without any apparent concern as to present or future situation. This is an ominous calm; for after a few hours the pain and burning sensation in the stomach return with increased violence; the vomiting becomes frequent and distressing—the fluid brought up containing minute flakes or flocculi, resembling the crust washed from a port-wine bottle, but little or no bilious matter," and every thing that is swallowed is forcibly ejected. "This second paroxysm continues commonly from twelve to thirty-six hours, when the energies of the system are worn out in the struggle. The pulse sinks, the extremities become cold and clammy, the tongue is black, and the matter thrown up consists of a black ropy fluid resembling coffee grounds suspended in a glairy fluid." The burning in the stomach and bowels is distressing in the extreme. "Diarrhœa usually occurs at this period—the discharges being green, or black. Hiccough, violent delirium, hemorrhages, stupor and convulsions are apt to occur in fatal cases."

Although the above describes the general characteristics of yellow fever, still a great diversity of modifications are presented in different cases. Thus in some instances the principle of life is destroyed in the onset of the attack, and the patient expires without any symptoms of reaction occurring. "In other instances violent and furious delirium, or mania ushers in the disease, terminating in a few hours in insensibility and convulsions. Sometimes it commences and proceeds to a fatal termination in so insidious a manner, that the patient himself and those about him are scarcely aware that he is much indisposed. In such cases there is, however, always a remarkable change in the expression of the patient's countenance, as well as in his usual temper and habits. In almost all instances of this disease, the countenance is expressive of intense anxiety and despair during its early period, and of gloom or sullen abandonment in the last stage." I heard it stated by a physician, that of two hundred patients sick of yellow fever that came under his care during the season of the prevalence of the disease in Philadelphia, no two cases presented precisely the same modifications of symptoms.

Causes.—Malignant forms of disease, such as yellow fever, appear to be caused by poisonous agents generated in certain localities in hot climates, where there is never any severely freezing weather. Dampness exerts a powerful influence in producing these as well as other forms of disease.

Treatment of Typhus, Congestive and Yellow Fever.—In all aggravated forms of disease, an energetic and persevering course of treatment should be instituted in the early stage of the disorder, before the energies of the system become exhausted.

The disease commencing with a state of extreme prostration and stupor, the *third preparation of lobelia* should be given freely, also *stimulating injections*, and friction on the surface; together with the *vapour bath* and *stimulating applications* to the skin, with a view of aiding the feeble efforts of the constitution in causing a *determination to the surface*, and in establishing *reaction*.

The *third preparation of lobelia* answers several important indications. Besides its *emetic* properties it is a powerful diffusive stimulant, and it also possesses strong anticeptic properties. The third preparation of lobelia, in a strong decoction of bayberry, will be found more effectual than any other preparation of medicine in low or malignant fevers.

In some instances the *pepper sauce* will suit the stomach for a time better than any thing else. When the tongue is dry and the patient craves acids, the pepper sauce will generally be found beneficial.

A mixture of lemon juice and loaf sugar, in some instances will

agree with the stomach for a time, and be the only kind of nourishment that the patient can relish.

Capsicum or Cayenne Pepper.—In all cases where the stomach has lost the power to digest food, an important indication in the treatment is to sustain the vital principle in its curative efforts by a pure and permanent stimulant. Cayenne is the article adapted to fulfil this grand indication. It should be given freely in all cases, either in full doses repeated every two or three hours, or in smaller doses more frequently repeated. Half a teaspoonful of cayenne, mixed in half a teacup of strong bayberry tea, constitutes a preparation suited to all cases.

The compound Lobelia pill may be used freely in all cases, and under all circumstances.

The Vapour Bath.—"In all cases," says Dr. Thomson, "where the heat of the body is so far exhausted as not to be rekindled by using the medicine, and chills or stupor attend the patient, then *applied heat* by steaming becomes indispensably necessary." The steam may be applied to the patient on a mattress or couch. A moderate sweat continued in this way for an hour, if the patient can bear it, is generally better than a profuse perspiration, in those cases of great prostration; still the vapour should be as hot as the patient can bear it, as the most important object is to furnish the blood with caloric and electricity from the steam, by which the power of resisting disorganizing influences is strengthened. If there be fever, or the patient is oppressed, the surface should be bathed with whiskey, vinegar, or water, and always when a patient faints, dash cold water or spirits in the face. It is very necessary to pay particular attention to bathing the surface, not only during the steaming, but at other times, when the skin is intensely hot, or the patient very low. After the bath, the surface should be washed with vinegar or whiskey, or in very low cases, strong stimulants should be used, as No. 6, third preparation of lobelia, pepper sauce or stimulating liniment. The clothing of the patient should be changed frequently. In applying warmth to the patient in bed it should be a moist heat when the skin is dry or feverish, as from bottles of hot water or hot bricks wrapt in damp cloths; and when the patient is in a cold clammy sweat a dry heat may be applied, as by bottles of hot water, or narrow bags filled with hot sand, salt or ashes, placed by the sides of the patient, extending from the arm-pits to the feet. In a prostrate state of the system, or when the skin is very dry and hot, care must be observed not to occasion so high a degree of heat as to oppress the patient. Frequently bathing the surface with whiskey is of great importance in all low or malignant forms of disease.

It matters not whether the disease comes on with great excite-

ment and delirium or with a state of congestion and oppression, as regards the general course of treatment. The emetic and injections proper in a state of congestion and extreme torpor, are equally applicable where there is great excitement in the system. I have in repeated instances observed a dose of the third preparation of lobelia given in bayberry tea, to have great influence in moderating, and in some instances to overcome delirium; and on the return of the delirium, by repeating the dose, these symptoms again disappear; and in this way patients have in some instances been kept comparatively calm and quiet, and able occasionally to sleep, who would have been in a state of extreme restlessness and delirium without the medicine.

It is recommended by some practitioners to use the cold shower bath in the first stage of the disease, where the fever is vehement. Of the utility of this practice I cannot speak from experience, never having used it except after the vapour bath. Professor Mitchell asserts that he has observed the character of blood changed—becoming more perfectly vitalized by a cold shower bath. The shower bath causes the patient to take more air into the lungs, and in this way the blood becomes more perfectly vitalized.

In a more advanced period of the disease, the patient will require to be nourished with wine whey, essence of beef, mulled egg, crust coffee, &c.

Injections.—The importance of employing stimulating injections in all cases of malignant disease cannot be too strongly impressed upon the minds of those who have the management of such cases. Indeed they constitute the most effectual means of preventing putrefaction of the contents of the bowels, and of preventing stagnation of blood in the mucous membrane of the bowels. When there is a strong tendency to putrefaction, from one to three tablespoonsful of the liquid of the third preparation of lobelia, in half a pint of bayberry tea, should be administered by injection, and repeated every hour or two, as the urgency of the symptoms may demand.

Tonics.—When the tongue manifests a tendency to clean along the edges, with an occasional absence of fever, tonics will be proper, such as are recommended in the treatment of remitting and intermitting fever, as quinine, Peruvian bark, Virginia snake root, &c. The Virginia snake root may be used, however, in any stage of the disease. It answers very well given in decoction with capsicum or composition tea. Recoveries from these low forms of fevers are usually very slow, and the tonics and other remedies require occasionally to be changed. Fifteen or twenty drops of the "elixir of vitriol," given in a wineglassful of some bitter infusion, forms a good tonic.

Patients in a state of convalescence sometimes crave hard cider, and under these circumstances, old bottled cider will be found to increase the appetite, and to add tone to the stomach.

In all these low or malignant forms of disease, the floor of the sick room should be occasionally sprinkled with the chloride of soda; or the chloride of lime be placed in dishes about the room. This will greatly improve the air of the room, and be an advantage to the patient, and to the attendants.

In a recent conversation with Dr. Shaw, who had been practising in the west, he mentioned the case of a female who was extremely ill with a form of disease that prevailed in that section of country, and proved frequently fatal, termed *congestive typhus*. The patient had retained nothing on the stomach for two days; she had cramps in the limbs, and there was a tympanitic state of the bowels. In this condition the doctor ordered an enema to be administered of half a pint of No. 6, which, producing scarcely any impression on the bowels, the same quantity was repeated, which was also retained, occasioning much distress. Shortly after, another injection was given, composed of nearly half a pint of the third preparation of lobelia. This likewise was retained, causing great distress in the bowels: the patient tossed about in every direction. On the following day the patient was able to sit up, and recovered rapidly. Dr. Shaw was of the opinion that the disease was on the point of terminating in mortification of the bowels, at the time these injections were given, but was prevented by their influence.

I knew an instance where injections were repeated and retained until ten ounces of the third preparation were contained in the bowels at one time. This patient also recovered, after the symptoms had assumed a very alarming character.

Diet.—During the earliest stages of these fevers, and until the disease is on the decline the nourishment should be confined to liquids, as barley-water, gum-water, crust coffee, &c.; indeed it is better to have no food in the stomach, than to take such as will disagree. In cases of great prostration of strength, wine whey and essence of beef may be necessary.

In bad cases, patients will generally experience more or less distress under the operation of a course of medicine; but this in general is to be considered more favourable than when the sensibility is dormant. Patients are sometimes much distressed, for many hours together, under the influence of the emetic and injections, and shortly after the disease takes a very favourable turn.

Unfavourable symptoms.—The canine laugh, which is an involuntary contraction of the upper lip when the patient attempts to speak; twiching of the tendons; hot hands and cold wrists, with a cold clammy moisture of the skin; answering to imaginary sounds;

watery diarrhœa; and grasping at imaginary motes in the air, are symptoms which indicate imminent danger. More especially alarming is the case when several of these symptoms are presented.

Closing Remarks.—It is not important to know the particular name of disease, for all cases should be treated upon general principles, whether it be Typhus, Typhoid, Congestive, Yellow, Spotted Remitting, Bilious, or Nervous fever. Courses of medicine constitute the most effectual means in all cases, but more especially in the earlier stages of disease. Patients will sometimes be distressed several hours under the influence of efficient doses of the emetic. I have observed patients to be distressed twelve hours under the operation of a course of medicine. No injury will result from such operations, but on the contrary they seldom fail of making a decidedly favourable impression upon the system. The free use of cayenne and of the compound lobelia pills will be proper in all cases, and may be employed as general remedies until the use of tonics are indicated. The third preparation, given in strong bayberry tea, is especially adapted to all cases of a malignant character.

CHAPTER II.

ERUPTIVE DISEASES.

SECTION I.

SMALL-POX.

This disease is characterized by a peculiar form of eruption which affects the skin during the progress of the disease. All the other symptoms are such as occur in other acute diseases.

Small-pox is highly contagious, and may be taken at any period of life. Like measles and scarlet fever, small-pox very rarely occurs more than once in the same person.

Previous to the introduction of vaccination by Dr. Jenner, the mortality from small-pox was very great; hence it has been dreaded more than any other contagious disease.

Cause.—Small-pox is caused by a certain *specific* poison, communicated to the system either by inoculation, or by breathing the effluvia arising from the body of one affected with the disease.

There are cases of small-pox, however, which arise from causes independent of exposure to the disease in others.

From the period when the small-pox poison is first introduced, up to the time when its influence upon the system is first manifested from seven to twenty days may ensue, though in the great majority of cases, this period is between the ninth and fourteenth day.

Small-pox is divided by medical writers into two varieties—the *distinct* and *confluent*. There is no essential difference between these, other than that the latter is a more malignant form of the disease: the eruption, instead of remaining in distinct and separate pustules, run together and form irregular masses, or patches. In some instances the pustules are *confluent* on the face, while they are *distinct* over the body.

Symptoms and course of the distinct or milder variety.—In whatever way the small-pox poison is introduced into the system, it is carried to the stomach, and upon this organ its deleterious influence is first exerted.

Chiliness and langour, loss of appetite, aching pains in the back and lower extremities, great thirst, nausea and vomiting, with pain and distress at the pit of the stomach, are the usual symptoms accompanying the forming stage of the disease.

As the constitution reacts, fever becomes developed, and generally, in the course of three or four days, the eruption appears. The fever, in small-pox, presents the same character as ordinary bilious fever, such as a hot and dry skin, furred tongue, costive bowels, pain in the head, and scanty, high-coloured urine. Bleeding from the nose is apt to occur during the first and second day of the fever. "The mind is dejected and confused, and towards the end of the third day the tongue usually acquires a bright red colour."

"Shortly before the appearance of the eruption, an unusual tendency to perspiration generally occurs in adults, and frequently much drowsiness and sometimes coma" (or stupor) "supervenes at this period." "In children the eruption is sometimes preceded by convulsions; but tendency to free perspiration very rarely occurs in them." In many cases the hands and feet are cold throughout the whole course of the disease, more especially in very young children.

The *eruption* first appears on the face, and generally in the course of twenty-four hours is spread over the body and limbs, "consisting at first of red points, which by the middle of the second day present small elevations, with inflamed basis, which as yet discharge no serous fluid if punctured, but the cuticle appears distended by a sort of semi-transparent plastic lymph. Towards the end of the second day, some of these pustules present small depressions in the centre; and on the following day these character-

istic depressions become conspicuous in nearly all of them. Where there are but few pustules, they often remain elevated and pointed, with but very slight central depression; but where they are numerous they become flattened, with distinct depressions in the centre. As the pustules increase in size their flattened form becomes more conspicuous. About the fourth day they assume a whitish colour, and become surrounded by a pale red areola. When the pustules are very numerous, these areolæ run into each other, and give a uniform appearance of redness between the pustules.

The fever always remits or entirely disappears as soon as the eruption is fully out. By the fifth or seventh day of the eruption, the serous fluid contained in the pustules begins to change its colour, "marking the stage of suppuration." As suppuration goes on, these pustules become distended with pus, and losing their flattened form, acquire a spherical shape."

The face begins to swell, generally, by the eighth day, and occasionally the eyes become entirely closed. The fever usually returns during this stage of the disease.

"Towards the end of the tenth day, the swelling of the face begins to subside," and the hands and feet, and other parts of the body, become swollen and tender.

Soreness of the throat, and a copious discharge of saliva, almost invariably accompany the suppurative stage.

"As the disease advances, the pustules become gradually yellower, and more opaque, and arrive at their full state of maturity about the twelfth day. After the pustules have acquired their perfect state of development, they sometimes remain stationary for several days; but more commonly a brownish spot makes its appearance on the centre of each pustule as soon as the process of suppuration is completed, acquiring at the same time a rougher aspect, and deeper yellow. Soon after this change the pustules begin to shrink, becoming gradually drier, darker, and harder, until the matter is converted into a brown crust." These scales are frequently formed on the face, when the "pustules on the extremities have scarcely arrived at maturity." The mild form of small-pox rarely leaves the skin permanently marked or pitted.

Such is the process by which the constitution works off from the system the poison of small-pox,—first, by the reaction or fever, by which the disease is thrown to the skin, and then by certain mysterious actions, there is formed on the surface the same specific poison which caused the disease.

These sanative operations of the constitution, however, are liable to be perverted by various causes, and the disease to assume a malignant and dangerous character. In some instances, there is a strong tendency to putrefaction,—"The heat is acrid; the perspiration clammy and offensive; watery diarrhœa often occurs; the face is bloated and red; the eyes watery and inflamed; and the ap-

pearance of the eruption, and its progress, are irregular. The pustules commonly acquire a dark or livid hue; are surrounded by brown, or almost black margins; and become filled with a bloody serum instead of pus."

Where the disease is of a violent or malignant character, the eruption, instead of being in distinct or separate pustules, appears in irregular masses, or patches, by the pustules running together. This forms the *confluent* variety of small-pox.

Confluent small-pox assumes various modifications. In some instances the disease is highly inflammatory, commencing "with strong chills, succeeded by intense febrile heat; a frequent, full, and hard pulse; high-coloured and scanty urine; flushed countenance; sometimes delirium; and in children often with convulsions." The tongue is dry and harsh, and frequently coated with a dark or black fur, accompanied with excessive thirst. In some instances the brain becomes greatly affected, giving rise to violent delirium, stupor, and convulsions.

"The tendency to profuse perspiration, so conspicuous in the distinct small-pox, is rarely observed in the confluent variety; but profuse diarrhœa sometimes occurs shortly before the appearance of the eruption, and still more commonly during the suppuration." The pustules are generally "irregular in shape, and much less elevated than in the distinct small-pox, and the parts not covered with the eruption are pale and flaccid."

"In the more aggravated instances of *confluent* small-pox, it often assumes a typhus character." "The chilly stage is unusually protracted; the pulse remains small, weak, and frequent, and the patient complains of much muscular prostration. Various symptoms of nervous disturbance are apt to occur—such as vertigo, faintness, twitching of the tendons, and even convulsions. The urine is colourless, and the face pale and sunken. The pustules come out slowly and irregularly, appearing simultaneously on every part of the body, yet sometimes first on the extremities." "The eruption sometimes disappears on some parts without passing into the pustular state; and slight causes, such as cold, or mental agitation, may cause the whole eruption to recede; in which case convulsions, or apoplexy, or fatal congestion and effusion into the lungs, are apt to supervene. Suppuration goes on slowly, and imperfectly; the pustules becoming filled with a thin watery pus. The intermediate skin is seldom much tumified, and remains pale."

Treatment.—Small-pox should be treated on general principles, the same as in other forms of disease accompanied with fever. To cleanse the stomach by emetics; to promote the action of the bowels by injections; and to sustain the vital powers by pure stimulants, constitute the most important indications in the treatment of small-pox.

The course of medicine administered in the early stage of small-pox, tends, to relieve the distress, and to cause the disease to assume a favourable aspect. The *course of medicine*, however, will be proper at any period of the disease when the condition of the patient seems to require it.

During the cold or forming stage, the patient should be kept warm; but after the fever is established, the covering should not be too great, nor the room kept uncomfortably warm. It is also important that the room should be well ventilated. The patient's clothing should be changed every day, taking especial care that the fresh clothing be perfectly dry before it is put on.

When the pustules are distinct and not very numerous, and the symptoms are of a favourable aspect, it will not be requisite to give much medicine. An occasional dose of the composition or pepper tea; or if the patient be a child, simple herb teas, as pennyroyal, sweet marjoram, or balm, will be sufficient. The bowels to be relieved, when necessary, by injections.

When the symptoms are very distressing, or the patient unable to bear the fatigue of sitting up, emetics may be given without previously administering the vapour bath. Much benefit may be derived from broken doses of lobelia, when the fever is violent.

The Vapour Bath.—During the chilly or forming stage of small-pox, more especially when the efforts at reaction are feeble, and the cold stage consequently becomes more protracted, the vapour bath is of essential benefit, and when followed by an emetic will seldom fail to bring on reaction. The bath also prepares the skin for the reception of the eruption.

During the eruption, an occasional vapour bath will prove beneficial, by promoting the secretions and exhalations from the skin. In the latter stage of the eruption, when the scabs are coming off, the vapour bath will be of especial advantage in restoring the skin to a healthy condition, and thereby prove a preventive to the various affections which sometimes follow as a consequence of an unhealthy condition of the skin. While steaming, the patient may be washed or sponged over with soap and water, or with a weak solution of sal æratus in water. The temperature of the water should be regulated to suit the feelings of the patient. A strong decoction of sumac berries and leaves, or of bayberry powder, adding a portion of cayenne, may be given once or twice a day, in ordinary cases, or substituted for the composition and cayenne, and given several times a day. This also forms a useful gargle for the throat, which is in most instances, considerably affected.

Cold Drinks.—Where the thirst is urgent, moderate quantities of cold water, or lemonade, may be allowed the patient, more especially after taking a dose of the hot medicine.

The Diet.—During the early stage of the disease but little nourishment will be desired. Crust coffee, barley-water, elm gruel, &c., are suitable in ordinary cases, until the disease is on the decline, when a more generous diet may be allowed, as chicken tea, milk porridge, toast and milk, soft boiled eggs, custards, &c. In the confluent form of small-pox, where the symptoms indicate great prostration of the vital powers, wine whey and the essence of beef should be given as nourishment. Five or ten grains of the carbonate of ammonia may be added to a wineglassful of the whey, as it tends to prevent acidity of the stomach, and also affords a grateful stimulus. Constipation of the bowels may be in a great measure overcome by a diet consisting principally of unbolted wheat flour gruel, calves' foot jelly, stewed prunes, Indian gruel, well boiled, or bread cut in thin slices, well toasted, and softened with sweet cream, or boiled milk.

When the disease is of a typhus, or otherwise malignant character, the treatment should consist of such means, both external and internal, as are best adapted to support the prostrate and sunken energies of the constitution, and to assist the stomach to cast off offensive matters, which tend to weaken and oppress its powers. I know of no better emetic, in such cases, than the liquid of the third preparation of lobelia, in a strong tea of the sumac or bayberry. A teaspoonful of the third preparation of lobelia to a tea cup half full of the above tea, and the dose repeated every hour or two, should be continued until the symptoms become more favourable. I have found it necessary in some instances, to continue the use of the third preparation for several days and nights in succession, together with pepper tea, wine whey, and carbonate of ammonia.

In some instances, the lobelia powder, put in hot bayberry tea, and then strained, answers better than the third preparation of lobelia.

The patient's clothes and bed-clothes should be changed frequently. A feather bed should be avoided, except in the middle of winter.

The "inward heat" should be maintained, to keep a determination to the surface. This may be accomplished, in ordinary cases, by an occasional dose of composition or pepper tea, or by simple ginger, or pennyroyal tea.

During the progress of suppuration, but more particularly when the scabs begin to form, patients are very liable to be restless and greatly distressed. There is probably no remedy for this equal to the vapour bath. I have seen patients in great suffering and distress, rendered comparatively comfortable and quiet, in a few minutes after applying the vapour bath. Applied in bed, as directed for steaming in bed, the patient will bear it from half an hour to an hour, and even longer. During the steaming,

the surface should be washed over freely with castile soap and tepid water, or sal æratus water, and after the bath, the bed-clothes, as well as the clothes of the patient, changed.

I knew an instance where a patient being steamed at a time when the scabs were fully formed, and almost dry, that they came off in a body, and left the surface almost "raw," the disease having been of the confluent form, and the eruption covering almost the entire surface. An ointment made of sweet oil and lime-water was spread on soft cloths, and applied over the body, and in two or three days the soreness was principally removed.

During any stage of the disease when the skin is very hot, the surface may be sponged occasionally with tepid water, and the external covering be kept light. It is injurious to a patient to keep his room very hot and close. The disease is more dangerous in hospitals in consequence of the vitiated air.

Tincture of lobelia and water answers very well to sponge the surface with; but all kinds of oils or fat should be kept off, as they finally tend to aggravate the distress. A mixture of lime-water and sweet oil may be applied with benefit. The mucilage of slippery elm will afford relief, and may be applied to various parts in the form of a poultice. Washing the surface every day with warm soap suds, by cleansing the skin will promote the comfort of the patient.

Camphor Liniment.—"Take of camphor, *half an ounce;* olive oil, *two fluid ounces.* Dissolve the camphor in the oil." This liniment is recommended as a means of preventing, or at least lessening pitting of the skin on the face. It is directed to be used in the early stage, soon after the eruption appears.

The eleventh and thirteenth days are said to be the most dangerous periods of the disease.

During *suppuration*, or in the latter period of the disease, the system should be nourished by the most nutritious diet that the stomach can take, such as wine whey, milk porridge, essence of beef, mulled egg, &c. And in order to sustain the system in the latter period, the stomach should be well cleansed in the early stage of the disease, by courses of medicine. It is not in every case, however, that nourishing food can be taken, except in small quantities; and under these circumstances, pepper and other stimulants must be used to sustain the restorative actions.

To prevent Pitting.—Professors Chapman and others recommend slippery elm mucilage spread over the face, and covered with *gold leaf*, such as is used by the dentists, and to be applied on the third day of the eruption. I have tried the gold leaf in one case, but it did not succeed; the case, however, was of a desperate character, and I cannot say how it might answer in less violent cases. Others

recommend the application of a sheep's caul, kept over the face, in order to exclude the air. To prevent pitting, it is important to exclude the *light* as well as the air. The gold leaf might be spread over the caul, which would prevent the admission of light.

When the eyes are very sore, they should be kept covered with soft cloths, wet frequently with rose-water or raspberry-leaf tea.

Small-pox attacking females in a state of pregnancy, is considered by the medical profession as always dangerous.

The distinct variety of small-pox seldom proves fatal under judicious Thomsonian treatment; and even in the confluent form, unless under unfavourable circumstances, the system, by proper assistance, will, "work out its own salvation." When the vital powers are greatly prostrated, and the disease assumes a typhoid or malignant character, it almost always proves fatal.

Favourable Symptoms.—A well developed eruptive fever; the pustules remaining distinct, round, and filling with thick yellow pus, and a blush or areola, encircling their base.

Unfavourable Signs.—When the reaction or fever that brings out the eruption is imperfectly developed, indicating want of vital power; a sudden subsiding of the swelling of the hands and face, with pallid countenance, or a striking in of the eruption, the case may be considered as of a highly alarming character. Whenever the symptoms assume an unfavourable aspect, a thorough course of treatment is required to arouse the sinking energies of the system.

A Case.—I was called to attend on Mrs. P———, who had violent symptoms of approaching abortion. She was in her third month of pregnancy,—a period at which abortions are very liable to occur. A full course of medicine was given, which eased the pains for a time. On the following day, however, they returned, and I thought abortion must take place. The third preparation of lobelia was now given freely, until very copious vomiting ensued, when the pains ceased and did not again return. On the following day an eruption appeared, and which proved to be genuine small-pox. The eruption came out so thick that it ran together, and formed what is termed the *confluent* small-pox. The case proved to be of a severe character, but the patient recovered perfectly and without having any return of bearing down pain, or other symptoms threatening abortion.

The above case illustrates the safety and advantage of treating all violent forms of disease upon general principles, not regarding the name by which the disease may be designated. Thus, the same means that prevented the abortion, were precisely such as were adapted to throw the small-pox to the surface. And if the symptoms of abortion had been occasioned from other causes than

that of small-pox, poison, still the same general plan of treatment would be indicated. Thomsonians do not require to wait for a disease to become developed, so that they can give it a name before they administer medicine. Hot medicine, and in violent attacks, a course of medicine cannot be given amiss. The same means that will assist nature in bilious fever, will do the same in small-pox, or in any other disease. It is at least probable that the thorough treatment pursued in the above case, prevented abortion by cleansing the stomach, and throwing the small-pox to the surface.

The question is frequently asked, whether the stimulating medicines, given freely, will not make the eruption greater than it would have been without it? To this it may be replied: If the disease is not thrown fully to the surface, the eruption may be less, but the constitutional symptoms will be more violent and dangerous than where the eruption is greater, and the disease effectually thrown to the surface by pure stimulating medicines. To cast the disease off by the surface is the method established by nature, and these curative efforts should be aided.

I am not in the habit of giving largely, hot medicine, in the early stage of the disease, nor to keep the patient covered uncomfortably warm during the fever, nor in any subsequent stage of the disease. But a thorough course of medicine will be safe and useful in any stage of small-pox, and also the free use of pure stimulants. A course of medicine in the early stage of small-pox by cleansing the stomach, will tend to lessen the eruption, and at the same time remove the disease from the internal organs. Chronic affections often follow small-pox, owing probably, in many instances, to the disease not being effectually thrown to the skin.

SECTION II.

VACCINATION—COW-POX—KINE-POX.

The practice of vaccination originated in England, about the year 1796. It was introduced by Dr. Jenner.

In the year 1775, Jenner who was then a student of medicine, one day heard a dairy maid in the office, in conversation with his preceptor, declare that she was not afraid of the small-pox (which was at the time prevailing in the neighbourhood) for she had taken the kine-pox, and that dairy maids that had taken the disease from the cows never took the small-pox. This declaration of the milk girl, first gave Jenner the idea of

introducing the cow-pox by vaccination, as a means of protecting the system from small-pox. Although it had been known in some of the dairy counties in England many years previous to the time of Jenner, that cows were subject to an eruptive disease which being communicated to the hands of the milkers, produced pustules, which protected them from small-pox; yet no one before Jenner ever thought of introducing a preventive to the small-pox, by inoculation with the cow-pox matter.

The opposition that Jenner met with from the medical profession, in introducing this new practice, was of the most hostile character. Two physicians in London went so far as to declare through the public journals, that introducing the disease from an animal into the human system would convert mankind into a sort of mongrel, partaking of the nature both of man and beast. It was even denounced from the *pulpit*, as an invention of *satan*, and that the devil first introduced the practice by vaccinating Job.

After many years of devoted attention to this subject, Jenner presented an essay to the Board of Physicians of London, containing an account of his experiments in vaccination, and furnished proof of the protection it afforded against small-pox. They, however, *returned* the essay, with the advice to suppress its publication, or otherwise he would be considered as either a "*fool or a knave.*"

The frightful and ridiculous accounts related concerning vaccination, during its early struggles against popular prejudice, were probably not even surpassed in inconsistency, by the multitude of gross and palpable misrepresentations which are "wafted on every breeze," of the *danger* of *steam* and *lobelia.*

The practice of vaccination, however, finally gained the confidence of many medical men, and it soon became generally adopted. Jenner on his first visit to the United States for the purpose of introducing vaccination, met with strenuous opposition from the medical profession of Boston, where he first landed. Dr. Benjamin Waterhouse, then a Professor at Yale College, was the first of the medical faculty who adopted vaccination.—He then introduced it into his own family, and about the same time Thomas Jefferson's family were vaccinated; and in a few years after, the practice of vaccination became generally adopted, not only in England and the United States, but throughout all civilized countries.

There is too much evidence to admit of a doubt that vaccination affords a protection in general, against small-pox: that it occasionally fails of affording protection to the system, is equally certain; but it should be borne in mind, that there are many assignable causes for these failures, such as, when the matter used is of spurious character, or its virtue destroyed by long keeping; or where erysipelatous inflammation takes place, and destroys the genuine character of the disease; or where the patient is affected

with an eruptive disorder, and thus pervert or change the vaccine disease.

I attended a female, not long since, who had the small-pox in a most violent form, and who had been vaccinated. On examining the mark on her arm, I discovered a large smooth scar, nearly the size of a quarter of a dollar, showing that the scab must have been three or four times as large as a genuine vaccine scab, and that the inflammation had probably so modified the disease as to afford no protection against small-pox. The family of this female had been vaccinated, and they all escaped the small-pox. It is at least probable, that in the greater part of those cases of small-pox that occur after vaccination, the failure of vaccination in affording protection, has been in consequence of imperfection in the vaccine viris; its nature changed by erysipelatous inflammation; the vesicle broken, and the fluid escaped; or from the scab being injured or rubbed off soon after it is formed.

Concerning Vaccination causing New Diseases.—That eruptive diseases are sometimes occasioned by vaccination, is admitted: but many, and probably the great majority of instances of disease, occurring after, and attributed to, vaccination, arise from other causes, independent altogether of the vaccine viris. How often does consumption, scrofula, and chronic inflammation of the eyes occur as a consequence of small-pox; and great numbers also die of the disease. Although small-pox may tend to purify the system, as Dr. Thomson asserts, yet there are few, probably, who have witnessed bad cases of it, that would willingly take it, rather than run all the risks attendant upon *vaccination.*

Characteristics of a genuine Vaccine Scab.—Not larger in circumference than a five-cent piece, nearly round, and an indentation, or eye, in the centre; smooth on the upper surface, and a bold and regular rounded edge; of a mahogany colour; and of a horny appearance, and brittle.

How to preserve the Scab.—Kept from the air in a sealed glass vial, and in the dark, a scab will continue good for years.

To prepare the matter for Vaccination.—Take a portion of the brittle part, near the middle of the scab—place it on a piece of glass or china, and put a drop of cold water on it, and when sufficiently soft, mash it with a knife-blade.

Season most Favourable.—In very cold or very hot weather vaccination is very liable to fail, requiring in some instances to be repeated several times before it will take.

Age.—A child should not be vaccinated until after it is at least two months old. The usual time is about the fourth or fifth month.

Precautions.—Be sure that the matter to be used is genuine. Do not vaccinate a child that is affected with any eruptive disease on the skin. Persons predisposed to erysipelas should not be vaccinated at a time when that disease is prevailing.

Place of Insertion.—The part to be preferred for introducing the matter, is just below the insertion of the deltoid muscle, on account of there not being so much motion in that part; or it may be done below the elbow, or under the knee on the calf.

The General Characteristics of the Genuine Vaccine Disease.—First: little or no inflammation until, or after the third day from the time the puncture is made.

Second: About the fourth or fifth day, a small point of inflammation, which gradually enlarges, and in about two days a small vesicle is formed, which is depressed in the centre, and without inflammation in the adjoining skin. The vesicle enlarges, remains circular, with a regular and well defined margin, more depressed in the centre, and a small crust begins to form in the centre of the depression, by the seventh or eighth day.

Third: Between the seventh and eighth days, there is an areola or blush of inflammation formed around the margin of the pustule. This circle of inflammation enlarges, and frequently by the ninth day it will be two or three inches in diameter, but remaining circular. The crust in the centre grows darker, "and the turged margin shining, as if the lymph were assuming the character of pus."

Fourth: The vesicle generally reaches its acme by the *eleventh* day, when the surrounding inflammation begins to subside, first immediately around the pustule, and gradually declines towards the circumference, where it leaves at last a mere ring.

Fifth: The fluid in the vesicle becomes thick and turbid, and soon forms into a smooth crust, of a dark brown, or mahogany colour. The crust in many instances, does not loosen and fall off under three weeks. "It leaves a permanent circular cicatrix, about five lines in diameter, and a little depressed, the surface being marked by many little *pits*, or indentations, denoting the number of cells of which the vesicle had been composed."

The Constitutional Symptoms attending the course of the vaccine disease, are generally very slight, especially in children. In some instances, there are chills and fever, and headach, which may need some attention, though generally they soon subside without any treatment. The glands under the arm, are apt to be

swollen and sore, and care should be taken, to avoid lifting the child with the hands under the arms, as is the usual practice.

Characteristics of Spurious or Imperfect Vaccination.—First: There is generally considerable inflammation and raising of the skin, on the second day after the puncture is made.

Second: The scabbing commences by the third or fifth day from the commencement of the inflammation, and runs its course in a much shorter time than the genuine.

Third: There is no depression in the centre of the pustule: it is raised up high, and has an irregular margin.

"When the inflammation commences on the formation of the vesicle, and assumes an erysipelatous character early, with much swelling, and the pustule assumes a blue appearance, it should not be considered as genuine."

Local Treatment.—When the inflammation becomes so great as to require attention, as it often does when the disease is of a spurious character, the parts should be bathed occasionally with tincture of lobelia, and apply a salve of simple cerate, or a preparation of sweet oil and lime-water. In some instances, a poultice of slippery elm and ginger, kept wet with the tincture of lobelia, answers better than salves. In severe cases, accompanied with much pain, the bowels should be relieved by injections, and the patient kept slightly nauseated with lobelia, or if necessary a vapour bath and an emetic given. When the swelling is very great, the arm should be kept at perfect rest, in a sling, or on a pillow.

SECTION III.

VARIOLOID—MODIFIED SMALL-POX.

This is an eruptive disease, which bears some resemblance to small-pox. It is in general, however, of a much milder character, and runs its course in about half the time required for small-pox.

It is the prevailing opinion among medical men, that varioloid, is genuine small-pox, operating upon a system which has previously undergone vaccination.

Symptoms.—The first symptoms, are lassitude, langour, loss of appetite, chilliness, and bad taste in the mouth. These are succeeded by a chill, in most cases, followed by fever. The fever,

in some instances, is as violent as in severe cases of small-pox, though, in general, it is of a mild character.

By the third or fourth day of the fever, the eruption begins to appear, and in the early stage, resembles the eruption in this stage of small-pox. There is seldom any fever after the eruption comes out. There is no *secondary* fever in varioloid, such as occurs in the *suppurative* stage of small-pox. In varioloid the eruption generally comes out at different periods, in successive crops; first on the face and breast, and often disappears there, by the time it first appears on the feet.

By the fourth or fifth day the pustules begin to dry, and by the sixth or seventh day, begin to fall off; whereas, in small-pox, the scabs seldom fall off before the fifteenth day.

The appearance and course of the eruption, in varioloid, is very diversified. In many instances there is a rash resembling measles, which precedes the eruption. It frequently happens that a portion of the eruption dries up in the course of two or three days, whilst another portion will become filled with a watery limpid fluid, by the first or second day, and by the fourth day, usually burst, and another set will become pustular, somewhat resembling small-pox pustules, and remain four or five days longer before they form into scabs. In some cases the eruption becomes confluent, by the vesicles running together in masses or patches; but even in this form of the disease, there is seldom any secondary fever.

Varioloid is not often fatal under judicious treatment; much less so than genuine small-pox.

Treatment.—The indications of treatment in varioloid, are to cleanse the stomach, which is the seat of the disease, by an emetic; preceded, if necessary, by the vapour bath; the bowels to be regulated by injections; and the constitutional efforts sustained by pure stimulants.

In the more violent cases, where the patient is much distressed, the *emetic* or *course of medicine* should be repeated at proper intervals, as long as the symptoms present an unfavourable aspect.

In many mild cases, simple herb teas, and a proper attention to diet will be sufficient.

The *vapour bath*, may be employed in any stage of the disease, and will be of especial benefit where the skin remains in an unhealthy condition after the eruption has passed off.

Varioloid seldom leaves the skin permanently pitted.

SECTION IV.

VARICELLA—CHICKEN-POX—SWINE-POX.

Chicken-pox is an eruptive disease, and generally of a mild character. Some medical writers maintain that varicella, is a modification of small-pox, others contend, that it is a separate and distinct disease.

Chicken-pox is almost universally confined to children, and a second attack in the same individual, is of very rare occurrence. Neither small-pox nor vaccination, affords any protection against chicken-pox, nor does chicken-pox prevent small-pox.

Peculiarities of Chicken-pox.—In general there is some slight fever, for one or two days, when the eruption begins to be disclosed, first appearing on the neck and back, in the form of small vesicles, filled with a pellucid fluid, which dry away and disappear on the seventh or eighth day,—before *small-pox* passes through its first stage.

The vesicle of chicken-pox, will discharge itself, on being punctured with a pin. A small-pox pustule is cellular, and will not discharge its contents if punctured

In chicken-pox the eruption comes out in successive crops, some drying away, whilst other crops are appearing, and thus continue for some days. The eruption produces a tingling feeling in the skin.

Chicken-pox, however, like other forms of disease, assumes various modifications. Severe cases, closly resemble genuine small-pox, leaving the same kind of pits in the skin.

Chicken-pox is seldom attended with danger, instances of death from it being very rare.

Treatment of Chicken-pox.—Where the case is so severe, as to demand particular attention, the treatment should be conducted on the same plan as is recommended in the mild form of small-pox, cleansing the stomach by emetics; injections to relieve the bowels, and occasionally some mild stimulant, such as composition or ginger tea, or herb teas, such as pennyroyal, mint, &c. Where large sores are formed, they should be covered with some simple salve, to exclude the air, and favour the healing process.

SECTION V.

MEASLES.

Measles are contagious, and seldom occur more than once in the same individual.

This disease, may be contracted at any period of life; but mostly occurs in childhood. The middle of winter, is the season in which it generally prevails.

The disease usually becomes developed, either on the fifth or seventh day, after exposure to the contagion; but occasionally, it is not manifested until two, or even three weeks from the time the disease is contracted or imbibed.

Symptoms.—Restlessness, chilliness, and shivering; pain in the head; an increased flow of tears, and a discharge of watery humours from the nostrils, are the usual symptoms in the first stage of the disease. Fever comes on; the throat becomes sore; there is hoarseness and a dry cough; thirst, nausea, and vomiting; hurried and oppressed breathing; and pain in the loins and back. Sometimes, there will be profuse sweating.

In about four or five days from the commencement of the fever, the eruptions appear in small red spots, similar to flee-bites, first on the face, and then spreading over the body and limbs. As these spots enlarge, they unite and form red patches, of an irregular shape, leaving portions of the skin retaining its natural colour and appearance.

When the disease, is of a violent character, slight delirium often occurs about the third day, from the commencement of the fever, and in children, convulsions are not unfrequent, a few hours preceding the appearance of the eruption.

The eruption on the face, usually reaches the height of its development, on the second day, after its first appearance, and on the following, begins to fade and subside. The face is mostly swollen, and in severe cases, so much so, as to nearly preclude the sight. The eruption on the body fades away in the same progressive manner in which it made its appearance; so that about the eighth day from the commencement of the fever, it disappears finally, on the back of the hands, where it remains longest.

Looseness of the bowels is apt to take place when the eruption begins to decline, which is not unfavourable at this stage of the disease; but where a diarrhœa occurs just before the eruption is making its appearance, it is to be considered as an unfavourable occurrence, as it tends to interfere with the regular progress of the disease, or cause it to retrocede. Active purging with cathartics

in the early stage of the disease, may prevent the eruption from coming out, and be the means of bringing on convulsions.

Measles occasionally resemble scarlet fever so closely that it would be difficult to distinguish between them. This, however, is a matter of little consequence, as the same course of treatment is applicable in both diseases.

Although measles, in general, are not dangerous, yet, in persons of feeble constitution, and delicate in health, they occasionally become a very formidable disease, assuming the form termed congestive, or typhus. In this form of the disease the vital powers are prostrate; a proper reaction, or fever, does not ensue or takes place very slowly and imperfectly. The countenance is pale, and the breathing slow and oppressed; the pulse feeble and laborious; the extremities cold—in short, all the vital energies are depressed. Infants are peculiarly liable to this form of the measles.

Treatment.—In ordinary cases of measles, much medicine is not required. The vapour bath and an emetic in the early stage, will lighten the disease, and render the patient much more comfortable; after which, give small doses of the tincture of lobelia, and warm teas, as composition, ginger, pennyroyal, summer savory, balm, &c., in order to keep a determination to the surface, and promote perspiration. It is a good practice to administer an injection daily, of composition tea, adding from a fourth to the half of a teaspoonful of green lobelia.

When the disease is of a more violent character, the patient much distressed, or the eruption slow in coming out, a course of medicine should be given, and if the symptoms continue violent, repeat the course every day, until there is a manifest improvement.

If the weather be cold, the patient's room should be kept comfortably warm, of an equable temperature; and the patient to avoid exposure to a current of air. Still, a proper ventilation of the room will be advisable, which may be effected without risk, when the patient is in bed. Where a stove is used in the room, a basin of water should be kept on it, to prevent the air from getting too dry.

Where coal is burned, every precaution should be used to prevent the escape of gas into the sick room, as it is exceedingly pernicious: retards the recovery of the patient, and increases the liability, to running from the ears, sore eyes, and to swelling of the glands.

Where several children of the same family are sick at the same time, let them be kept separate if possible, for if several children sick with measles, be crowded together in the same room, the disease will be much more difficult and dangerous.

The vapour bath may be administered with great benefit in all cases of measles; it not only tends to shorten the disease, but makes the patient more comfortable, and lessens the liability to diseases that are apt to follow measles.

Affections liable to follow Measles.—There is no disease which leave the system as susceptible to the morbid influence of cold, as measles. In fact, the effects which frequently ensue as a consequence of measles, are more unpleasant and troublesome than the primary disease.

Coughs, consumption, inflammation of the lungs, scrofula, diseases of the eyes, rheumatism, eruptions about the head, and running from the ears, are not of uncommon occurrence after measles.

The liability to these affections, however, will be greatly lessened when the Thomsonian practice is employed. A vapour bath about the time the eruption disappears, and the skin is peeling off, will tend to restore a healthy action in the skin, and diminish the liability to secondary forms of disease. If the tongue have an unhealthy appearance, and other symptoms which indicate a disordered stomach and bowels, a full course of medicine should be given, and use some stimulants to keep up a determination to the surface, together with a dose of the bayberry or sumac tea once a day.

Death seldom occurs from measles under Thomsonian treatment. Under unfavourable circumstances, however, as when two or three patients are crowded in a small room, badly ventilated; or when it occurs in persons predisposed to consumption, or to scrofula, it occasionally becomes an unmanageable disease.

Treatment.—The treatment for disorders following measles, must of course, be regulated by the condition of the patient: in slight affections giving some simple tonics; and where the symptoms indicate much derangement, vapour baths, injections and emetics may be required, followed by tonics, and such things as are considered good for restoring health, for instance, a strong decoction of pipsessawa, yellow dock root, and sarsaparilla.

If there be a discharge of offensive matter from the ears, they should be syringed every day with castile soap suds, and then wet a piece of cotton or wool, with tar water, or tincture of myrrh, or Haarlem oil, and put in the ear, pressing it in so that the liquid may pass into the cavity of the ear. A drop of Haarlem oil put into each ear, every day, during the first four days of the disease may prevent running from the ears.

Diet.—During the early stage of measles, and until the patient becomes convalescent, the diet must be light: elm gruel, crust coffee, barley-water, &c.

SECTION VI.

SCARLET FEVER.

Scarlet Fever assumes many grades of violence, from a very mild to that of a most malignant form of disease. It is generally treated of under three varieties.

First. The *simple* or milder variety.

Second. The *inflammatory*, where reaction or fever is of a high grade: and

Third. The *malignant*, where the vital powers are greatly enfeebled by the force of disease. The treatment, however, is to be conducted upon the same general principles, varying in promptness according to the violence of the disease.

General character and course of the simple variety.—Beginning with the usual premonitory symptoms of acute disease, such as paleness of the skin, loss of appetite, lassitude and chilliness which continue for an indefinite period, "varying from one to three or four days," when reaction takes place, and the patient experiences flushes of heat, pains in the head, loins, and extremities, sickness of the stomach, the skin becomes dry and hot, and the pulse frequent and quick.

"Generally within the first forty-eight hours after the commencement of the fever, a scarlet eruption comes out, first on the face, and then successively, on the neck, trunk, and extremities." "The rash consists of innumerable red points, which, running into each other, gives a diffused blush over the skin." In some cases the eruption appears in patches, "leaving the skin in the intermediate space of its natural colour."

Usually by the fourth or fifth day, the eruption and fever begin to decline; critical evacuations ensue, such as a copious discharge of urine, depositing a reddish sediment; a general warm perspiration; and sometimes diarrhœa. About the eighth day after the commencement of the eruption, the skin begins to roughen and peel off, at which time there is considerable itching over the surface.

Sometimes the disease assumes a more violent character;—there is much distress and sickness of the stomach, together with severe headach and general weakness. The reaction or fever comes on early, "with a feeling of stiffness and dull pain in the muscles of the neck and under the ears, and angles of the jaws." The throat becomes swollen, which renders it difficult for the patient to swallow; a hoarseness of the voice takes place, and there

is a "sense of constriction in the throat." The fever assumes a high grade of violence; the skin is dry and harsh; the tongue dry and of a bright red along the edges, and over its surface the little glands or papillæ may be seen projecting. "The eruption does not come out as early in this as in the milder form of the disease, and it is seldom diffused over the whole surface—appearing in irregular and not very large patches, on different parts, more particularly about the elbows. In some instances the rash disappears, and reappears partially at unequal portions of time, but without any corresponding change in the general disorder and the whole duration of the complaint is thus lengthened.

If the disease begins to decline by the fourth or fifth day of the fever, the throat rarely ulcerates, the swelling and inflammation subsiding as the disease abates. Where the disease is more protracted, "small ulcers are apt to form on the palate and tonsils, which are soon converted into superficial sloughs." "There is always a considerable quantity of viscid mucus secreted in the fauces, which often concretes into white flakes on the inflamed parts and presents the appearance of ulcers, where in reality none exists." As the disease gives way, "the sloughs in the throat begin to separate, and leave red ulcerated surfaces, which generally heal without difficulty. Sometimes, however, instead of separating about the eighth day, the sloughs enlarge, become brown and discharge an acrid saneous fluid; and in such cases the glands about the neck are generally swollen, hard and painful; and the patient is harrassed with painful diarrhœa and tenesmus. The inflammation occasionally extends into the trachea, and the patient dies under symptoms of acute bronchitis. The brain often becomes prominently affected during the eruptive stage, giving rise to deep and sometimes fatal stupor.

Malignant Scarlet Fever.—This form of the disease is marked by a general prostration of vital power. The reaction, though it may be apparently vigorous in the commencement, soon declines into a low, or typhoid fever.

"The eruption comes out irregularly, and is usually pale in the commencement, but "acquires a dark, or livid hue, in the progress of the disease. The eruption often strikes in soon after its first appearance, and in two or three days reappears on some part of the body.

The skin varies in its temperature; generally it is not very high, though occasionally there is a burning, acrid heat, over the surface. The brain is much affected early in the disease. The patient becomes delirious; the eyes are inflamed and dull, and the cheeks suffused with a livid flush, readily distinguished from the bright red which occurs in a less malignant form of the disease. "The tongue is dry and covered with a brown or dark fur, and the

breath fœtid." The ulceration of the throat assumes a very malignant character, and frequently it is converted into black and offensive sloughs, accompanied with an acrid secretion from the nose, which excoriate the parts with which it comes in contact. "The fever and ulceration of the throat frequently exist without there being any eruption developed during any period of the disease: this is called putrid sore throat. In some instances the vital powers are prostrated in the commencement of the disease to such a degree, that reaction does not take place. "The patient becomes pale, faint, and oppressed;" there is much distress and oppression at the stomach, with nausea and vomiting; giddiness, and a sense of weight in the head; and extreme debility. The breathing is oppressed, and sometimes there is a mixture of paleness and lividity on the cheeks. "The pulse is slow, irregular, and weak." "The bowels are torpid in the beginning, but towards the termination of the disease, diarrhœa almost always occurs in fatal cases." The eruption is at first pale, or of a copperish hue, which subsequently becomes purple.

Malignant scarlet fever, in some instances, terminates fatally as early as the second, third, or fourth day. In other instances, the vital powers will struggle with the cause of disease for weeks, occasioning a low typhoid fever, until finally, either the disease or the energies of the system are exhausted, thus terminating either fatally, or in convalescence.

A milder form of scarlet fever may assume a dangerous character, by two or more patients sick of the disease, being in the same room; more especially if the room be small, and the patients near each other. The exhalations from a patient sick of scarlet fever, will sometimes occasion a tingling in the nose, and even in the skin of the physician or nurse; and when patients are placed near each other, the disease will always become aggravated by it, and in many instances, prove fatal.

Scarlet fever, in its mild form, occasionally so closely resembles measles, that it becomes difficult to distinguish between them. The indications of treatment being the same, however, in both diseases, the difficulty of determining the name will occasion no embarrassment in directing the treatment.

Causes.—Though evidently contagious, still there is the most conclusive evidence that the disease is frequently produced by atmospheric causes, together with exposure to cold and dampness.

Treatment of Scarlet Fever.—A course of medicine, administered in the early period, will generally moderate the symptoms through the whole subsequent course of the disease, and in some instances will almost break it up at once.

In the mild form of the disease, after giving a course of medi-

cine, or simply an emetic, as long as the symptoms are of a mild character, nothing more will be required than to give occasionally of some mild stimulant, such as composition or ginger tea, or simple herb teas, such as pennyroyal, catnip, sweet marjoram, &c., and an occasional enema, to relieve the bowels; together with small doses of the tincture of lobelia, more especially at night.

Where the symptoms are more violent, and the patient much distressed, a course of medicine should be administered daily, and small doses of lobelia given every hour or two, in composition, bayberry, or pepper tea. It is not always requisite to administer the vapour bath previous to giving an emetic, as in some instances free vomiting should be produced two or three times in every twenty-four hours. Where the tongue is dry, and the patient thirsty, the pepper tea will answer better than the composition. Where the skin is very hot and dry, it will be difficult to produce perspiration, even by the vapour bath, without frequently washing or sponging the surface with cold water, or tepid vinegar and water, or what is still better, sal æratus water. A tablespoonful of cold water may be allowed the patient occasionally, where the tongue is dry.

Sponging the surface with cold sal æratus water, or weak ley, may be safely employed during the first two or three days of the fever, when the patient is very restless, and the skin hot and dry, and the patient is not chilled by it. After this period it will be safer to use tepid ablutions of weak ley, or sal æratus water, to reduce the heat of the skin, and quiet restlessness.

Injections are of essential benefit in the treatment of scarlet fever, as they not only relieve the bowels, but tend to equalize the circulation. They should be prepared in the usual form,—either of composition tea, adding a teaspoonful of lobelia powder; or bayberry tea, adding a teaspoonful of third preparation of lobelia.

In violent cases the injections should be repeated as often as every two hours. An occasional injection prepared of lobelia powder and warm water, will be found of benefit in relaxing the system, when the fever is very high; the injection should be retained in the bowels fifteen or twenty minutes. Sometimes this will occasion free vomiting, and prove of especial benefit. Persons unacquainted with the symptoms occasioned by lobelia injections retained, sometimes become alarmed. The patient will become restless, tossing about, with vomiting, and frequent retching; the system becomes greatly relaxed, the eyeballs are turned up, the lids partly closed, the countenance pale, and the breathing accompanied with a kind of sobbing. Care will be necessary not to keep the patient too warm, *externally*, when the fever is high. A hot stove room is very oppressive to the sick, unless water be

kept constantly evaporating on the stove, to prevent the air from becoming too dry.

The Vapour bath proves a powerful auxiliary in the treatment of scarlet fever; and the more frequently and more thoroughly it is administered, the better it will be for the patient. It can never do any harm, except by compelling a patient to set up longer than his strength will bear. If the patient be too weak to set up without being over-fatigued, then the patient should be steamed on a mattress or bed, in a horizontal position.

Precaution.—More than one patient affected with scarlet fever should never be admitted into the same room, where it can be avoided. This precaution is of the very greatest importance.

Treatment of Malignant Scarlet Fever.—Generally, the reaction commences violently, the system being thrown into a state of tumultuous excitement; but, from the power of the cause of disease, the vital energies soon become exhausted, and the fever assumes a low malignant or typhoid character. In other instances the vital powers are overwhelmed in the outset of the disease, and are unable to bring on reaction. The patient remains cold, and in a state of stupor, or he is thrown into convulsions. In either case, the treatment should be prompt and energetic, consisting of emetics, of either the liquid of the third preparation of lobelia, or some other preparation of lobelia, rendered stimulant by the addition of capsicum, or hot drops, and given in the bayberry tea. This, together with stimulating injections, and external warmth, will be the surest means of establishing reaction. To sustain the curative efforts of nature, active stimulants should be employed, as the third preparation of lobelia, in composition, bayberry, or capsicum tea. Wine whey, and carbonate of ammonia, will also be of advantage in the advanced stages of the disease, when the strength of the patient is far exhausted. A tablespoonful of capsicum tea, and as much wine whey, with about five grains of the carbonate of ammonia, forms an excellent stimulant in all low sinking states of the system.

If the skin be dry, a *moist* heat should be kept around the patient, by hot bricks wrapped in damp cloths; but where the skin is cold and clammy, a dry heat will be proper, together with warm frictions and stimulants to the surface.

"The *capsicum*," says Dr. Eberle, "appears to be a particularly valuable remedy in this variety of the disease. This article was first employed in malignant scarlatina, by Dr. Stephens, in a very fatal epidemic which prevailed at St. Christopher's, (West Indies,) in 1787, and it has since received the decided approbation of many eminent practitioners." The form in which the faculty employ it, is similar to Dr. Thompson's pepper sauce—a tablespoonful of cap-

sicum, and two teaspoonsful of fine salt, to half a pint of boiling water. Strain, and add an equal quantity of good vinegar. For an adult, a tablespoonful every half hour; for children, a less quantity, in proportion to their age. The throat to be frequently gargled or washed with it. "Stephens asserts that he employed this remedy in about four hundred cases, and with surprising success. The ulcers in the fauces soon cast off their sloughs, and commenced to heal; a general pleasant warmth was diffused through the system; and the vital powers speedily assumed a more active condition." There is, however, such an antipathy against cayenne pepper, that nurses sometimes refuse to give it, because it makes the child cry, and they have heard others say it is too hot for children. I have never observed any ill effects from the use of cayenne pepper, either in the young or old, but many children die, who probably might have been restored to health, by a free use of this pure stimulant. The capsicum tea I find to answer as well, or even better than the pepper sauce, more especially in cases where the stools are of a green cast, or emit a sour smell. As much cayenne as will lay on a five cent piece, and double the quantity of composition powder, mixed in a tablespoonful of bayberry tea, answers better, in many instances, than giving the tea without the powder: the dose to be repeated every two or three hours.

When the patient is thirsty, pennyroyal, or any other simple herb tea, may be allowed to be taken freely.

When there is high fever, an undue determination of blood to the head, or the throat much swollen, the system must be kept relaxed by lobelia given in broken doses, and administered by injection and retained. This is very necessary, more especially in the earlier stage of the disease. This course of treatment is not to exclude the use of stimulants; pepper tea, ginger, composition, or simple herb teas may be given. The compound lobelia pills may be used in the place of other medicine, when patients prefer the medicine in the form of pills.

Applications to the Throat, externally.—In all cases where the throat is much affected, a warm poultice should be applied. This may be made of Indian mush, well boiled, adding a portion of lard and ginger, and when the poultice is spread, cover the surface of it with lobelia powder. The poultice should be renewed, or warmed occasionally, and not allowed to become cold. Slippery elm, or flaxseed will answer as well as the Indian mush.

Gargles.—In the early stage of the disease, the tincture of lobelia answers well as a gargle. The capsicum tea, or pepper sauce, however, forms the best gargle in scarlet fever, and may be used frequently during the whole course of the disease. Swabbing the throat with the capsicum tea, or pepper sauce, is still more effectual

than the use of gargles; and in young children who cannot use the gargle, the swab must necessarily be used. This is to be done with a piece of sponge, or rag, tied firmly on the end of a stick. Dip the swab in the preparation, and rub over the throat. This is sometimes a difficult operation in children, but the benefit to be derived from it should induce nurses and parents to be persevering in its use. A soft piece of wood placed between the jaws, will enable the nurse to apply the swab more effectually. The child's head should be held firmly at the time.

The Diet, in the early period of the disease, should consist of liquids, such as barley-water, arrow root gruel, crust coffee, elm gruel, and gum arabic-water. In a later period of the disease, a more nutricious diet may be allowed the patient, as milk porridge, essence of beef, egg soup and custards. In a sinking state of the system, wine whey, with carbonate of ammonia, will be proper.

Scarlet fever is liable to be followed by dropsical affections, from exposure to cold, or inaccuracies in diet, before the patient has fully recovered from the primary disease. As long as the tongue remains coated, or does not present a healthy appearance, care should be taken to avoid exposure to cold or dampness; and the diet should be confined to such articles as are easy of digestion. I attended a little boy in Second Street, who had anasarca, or general dropsy, following the scarlet fever. Under the treatment, the symptoms all became more favourable, and the patient began to recover rapidly; but from eating heartily of broiled mackerel, which his stomach could not digest, dropsy of the chest ensued suddenly, and the case terminated fatally in less than forty-eight hours after.

An occasional vapour bath, followed by a shower bath, and the surface rubbed dry, and bathed over with some stimulating preparation, as pepper sauce, or No. 6 and water, equal parts, will tend to prevent dropsy, or other affections that might otherwise ensue, as a consequence of scarlet fever. The spice bitters, or other tonics, as Virginia snake root, or colombo, should be given two or three times a day, to assist in restoring digestion.

Where dropsy has ensued, the bath should be administered daily, as above directed, and followed sometimes by an emetic; broken doses of lobelia given either in tincture or pills, together with an occasional dose of composition or pepper tea; and as the swelling subsides, and the tongue becomes more natural, tonics will be proper. In the early stage of Dropsy, the compound lobelia pills may be used in the place of all other remedies, between courses of medicine, and in slight attacks they may be found sufficient to remove the complaint without courses of medicine. When the drop-

sical symptoms disappear, tonics, such as a strong tea of poplar bark, or of some other tonic.

A Case.—I was called to attend a young man who had been ill of scarlet fever about a week. The rash had been from the beginning, alternately appearing and disappearing. The fever was of a low grade, and attended with delirium. The principal medicines used in this case, and which proved successful, were the liquid of the third preparation of lobelia, in a strong decoction of bayberry tea,—a teaspoonful of the former to a teacup half full of the latter, repeated every two or three hours, in continued succession for several days and nights; together with an occasional injection of the same kind of compound. This medicine always quieted the delirium for an hour or two, and occasionally under its influence the patient would sleep. As the delirium returned, the dose was repeated, and these symptoms would again subside. The patient generally vomited once or twice in the course of twenty-four hours, but seldom complained of sickness at the stomach. Under this treatment, together with an occasional vapour bath, administered on a mattress, the patient recovered. The diet consisted principally of wine-whey and essence of beef.

The Thomsonian practice is generally successful in scarlet fever, when applied in the first outset of the disease, though occasionally it baffles the most thorough and judicious treatment. The treatment pursued in the above case is given in order to point out a course that may prove successful in other *desperate* cases. In bad cases of scarlet fever, the floor should be sprinkled three or four times a day with a few teaspoonsful of the chloride of soda, or the chloride of lime be placed in vessels about the room. This is more especially necessary where there are more than one patient in the same room.

SECTION VII.

NETTLE-RASH—HIVES.

This is an eruption resembling the rash produced by striking the skin with nettles. The skin is raised, and whitish on the top, with a hardness and swelling around the margin, and more or less inflammation, and is attended with painful itching and tingling.

There is a tendency in nettle-rash to disappear and reappear suddenly, and thus continues for several successive days.

In some instances, the eruption comes on only at night, with

an itching and tingling over the whole body, and when the skin is scratched or irritated, large *weals* immediately rise up, with a paleness or whiteness on the centre, and light-red margins, attended with intolerable itching and stinging pain.

Occasionally the disease becomes chronic, the swelling remaining stationary for weeks, or even months.

Cause.—Nettle-rash is caused by a disordered condition of the stomach and bowels. Eating shell-fish will sometimes bring it on. Balsam copaiva, where it disagrees with the stomach, will occasionally produce this kind of eruption.

Treatment of Nettle-rash.—The vapour bath, and a lobelia emetic, will, in many instances, remove the disease at once. If the first operation fail of effecting a cure, repeat it at proper intervals, until the general health is restored; giving occasionally composition or spice bitters; and cleanse the bowels by using injections, prepared in the usual form.

In milder cases, purified charcoal, taken in composition tea, two or three times a day, together with one or two injections, will be sufficient to rectify the constitutional derangement.

Lime-water is useful in all cases of nettle-rash, as the complaint is always attended with an acid stomach. The dose for a child is from a teaspoonful to a tablespoonful in boiled milk, taken two or three times a day.

A friend of mine informs me that half a teacupful of saffron tea, sweetened, and taken at bed time, will overcome the symptoms.

The Diet should be simple; avoiding all gross food. Where the disease has become seated, let the accustomed diet be changed to other articles of equally nutritious qualities.

Local Applications.—In recent cases, the tincture of lobelia, vinegar and water, or alcohol and water, may be applied immediately to the eruption. In chronic cases the stronger stimulants should be applied to the swellings, as the No. 6, third preparation of lobelia, pepper sauce, or stimulating liniment, &c.—All eruptive diseases of this kind are to be treated upon the same general principles.

SECTION VIII.

ERYSIPELAS—ST. ANTHONY'S FIRE, OR ROSE.

This form of disease is characterized by a redness of the skin, swelling, a tingling burning pain, and the formation of blisters on the inflamed surface.

Erysipelas probably never occurs except there be previous derangement of the general health. Usually the first symptoms are langour, chilliness, headach, loss of appetite, and other signs of a disordered stomach. These symptoms are usually followed by two or three days' fever, before the erysipelas makes its appearance. In some instances the fever is violent; in other cases it is of a milder character, and occasionally, though very rarely, the inflammation appears simultaneously with the fever.

"The inflammation comes out in the form of an irregularly circumscribed stain or blotch, which soon spreads over a greater or less extent of the contiguous surface." There is always more or less swelling, even at the commencement of the inflammation, and a burning, tingling pain, but the part does not throb or pulsate, except in very violent cases, and where suppuration takes place in the cellular tissue.

Usually by the third or fourth day, blisters are formed on the inflamed surface, filled with a "limpid or yellowish serum." In the course of two or three days, the blisters break, occasionally forming crusts, or large scales. In less than a week, in favourable cases, the inflammation and swelling begins to subside; the skin becomes pale, or of a yellowish cast, and presents a rough appearance, and shortly after the old skin peels off.

Erysipelas is generally confined to the skin, though in some instances, the inflammation extends to the adjacent cellular tissue. In cases of this kind, the pain is more severe, and the parts become extremely tender, and painful on the slightest pressure. The constitutional disturbances are generally severe, and the complexion sallow, indicating derangement in the functions of the liver. Frequently, in the severe form of the disease, suppuration takes places in the parts beneath the skin, and the patient experiences irregular chills: "the redness of the skin and the pain subside, but the swelling increases; there is much doughiness, and the parts remain in this state for some time" before the pus will find its way to the surface. When the fluid escapes, it frequently has the appearance of whey, and contains shreds of cellular tissue, like tow, or shreds of cotton.

The face and limbs are most liable to erysipelas. When it attacks the face, the swelling, in many instances, is so great as to

entirely close the eye-lids. More or less mental derangement usually attends such cases, especially when the inflammation extends over a considerable portion of the scalp.

The danger from erysipelas is not great, except when the brain is attacked by it, or when it occurs in vitiated or broken down constitutions, and the disease assumes a typhus character. There is a form of erysipelas which attacks females about a year old, appearing first on the privates, and subsequently becomes inwardly seated, and generally fatal. I have seen a case of this kind, attended with sloughing of the vagina, and where the inflammation finally extended over nearly the whole of the body. This patient died in about three weeks from the commencement of the attack. In this case the stomach and bowels were much disordered previously to the occurrence of the erysipelas.

In many instances, the disease is brought on by eating unwholesome food.

Treatment.—The most important indication for the cure of erysipelas, is to correct the disordered condition of the stomach and bowels.

A Thomsonian course of medicine I have known in many instances to check at once the farther spread of the inflammation. Where the inflammation is on the face, the bowels should be relieved by an injection, before the emetic be given. In mild cases, and where the general health is not much impaired, the treatment may be correspondingly mild. An enema to evacuate the bowels, together with hot teas, to keep up a moderate perspiration, will be sufficient in the way of constitutional treatment, as long as the symptoms continue favourable. A wineglassful of lime water, adding half the quantity of boiled milk, given two or three times a day, may be taken to correct the secretions of the stomach.

Where the countenance is sallow, indicating derangement of the liver, or where the fever is high, or the patient much distressed, the treatment should be more thorough. The enemas should be repeated occasionally, always containing a portion of lobelia. An emetic should be given as often as every day, in violent cases, and continue to give broken doses of lobelia, in composition or bayberry tea, or lobelia may be given in the form of pills. A teaspoonful of lobelia powder, given by injection in warm water, and retained in the bowels, will in general relax the system more, and prove more serviceable than administered in any other way. Free vomiting may often be effected in this way. In *all severe cases, attended with high fever, it is important to keep the system more or less relaxed by small doses of lobelia;* and likewise to give occasionally, either composition or pepper tea. The room should be kept of a moderate temperature. Very hot stove rooms are pernicious.

The parts affected should be kept elevated, if practicable:—

thus, if on the face, the head must be raised higher than the body, or if on the limbs, they should be kept elevated, to favour the return of the blood from the inflamed part.

Of all means for the cure of erysipelas, *emetics* are the most effectual. Besides fulfilling other important indications, they have an influence in restoring the secretions of the liver. It is the opinion of some medical writers, that the *liver* is more or less diseased in all cases of erysipelas. Emetics may be given without previously administering the vapour bath, but where the inflammation is on the face, it will be proper to use the warm foot bath, and an injection, previously to giving the emetic; and to continue warmth to the feet, by hot bricks wrapped in damp cloths.

Injections.—A case of erysipelas came under my care recently, where the symptoms assumed a typhoid grade, and the sensibility of the bowels was so low that injections of a tablespoonful of the third preparation of lobelia in bayberry tea, were not felt by the patient until after they had been repeated several times. When the sensibility of the bowels was restored, the injection occasioned violent pain and distress several hours. The erysipelas which had spread over nearly the entire surface of one of the legs, assumed a more favourable aspect immediately after the injection: it having aroused a new action in the system.

The Diet should be confined to the lightest kind of food, as slippery elm gruel, barley water, crust coffee, &c. In mild cases, or where the patient is on the recovery, more generous diet may be allowed, such as milk dishes, custards, boiled chicken, toast and tea, &c.

Where the attending fever is of a low typhoid character, with great prostration of strength, stupor, or low muttering delirium, and coldness of the extremities, active stimulants should be employed. The remedy most to be relied upon in such cases, is the liquid of the *third preparation of lobelia*, in a strong tea of the *bayberry* or *sumac*. The dose to be of the usual quantity, and repeated at intervals of from two to four hours. This medicine will cause the patient occasionally to vomit, and the matter thrown from the stomach is generally of a very foul character, consisting chiefly of thick brown flakes of morbid secretions, which had previously coated the mucous membrane of the stomach, which, if not removed, would continue to oppress the functions of that organ, and aggravate the disease. I have witnessed recoveries under this mode of treatment, in various forms of disease where the symptoms were such as are generally considered fatal. Beside the above remedy, the capsicum tea, carbonate of ammonia, Virginia snake root, wine whey, and essence of beef, may be employed to nourish and sustain the enfeebled forces of life.

Local Applications.—As a local application to the inflamed surface, the liquid part of the third preparation of lobelia has done well in all cases where I have employed it: for although a powerful stimulant, the patient's generally experience less burning in the part than before its application. Soap liniment, opodeldoc, sweet oil and lime water, and tar ointment, may either of them be applied to the parts affected. There are some skins which all kinds of grease disagree with;—in such cases, scorched flour or powdered slippery elm bark may be applied in a dry state. When the inflammation is on a limb, and the part remains swollen after the inflammation subsides, a bandage should be applied, commencing at the extremity of the limb, and bandaging upward.

Where there is evidence of an accumulation of matter in the parts, deep incisions should be made in order to give the matter an early opportunity to escape.

Children predisposed to erysipelas should not be vaccinated until the general health is restored.

As a general rule, poultices do not answer a good effect in erysipelas, except when the parts ulcerate, or become gangrenous; then the application of stimulating poultices may be useful. In case of simple ulceration, use a poultice composed of elm, ginger, pond lilly, and pounded cracker; but in case of gangrene, or mortification, the charcoal or yeast poultice will be more appropriate. A portion of cayenne or of composition powder should be added to the poultice.

In cases of erysipelas in children the tincture of lobelia answers very well to bathe the inflamed surface. Salt and vinegar is equally beneficial.

A severe case of erysipelas attended with extreme prostration of vital power, the countenance pale and sallow, pulse weak, with extreme weakness and a general want of sensibility, was recently cured under the free use of quinine and pepper, together with an occasional emetic and steam bath, and stimulating injections. The erysipelas which extended over nearly the whole of one leg, was bathed with the third preparation of lobelia. Wool pulled from a sheep, and bound on the inflamed part will answer a good purpose. The part that was next the sheep's skin should be applied to the erysipelas.

Erysipelas is much less dangerous where there is active inflammation, than where the parts are much swollen, with less redness, less heat, and feels doughy. Erysipelas is occasioned by debility, and it is by an inflammatory action that the vitality of the affected surface is preserved; therefore when the inflammation is of a low grade the third preparation of lobelia should be applied freely externally, and given in frequently repeated teaspoonful doses internally, until the stomach is thoroughly cleansed and the secretions restored—then give quinine freely.

SECTION IX.

SHINGLES.

This form of disease is characterized by a cluster or band of blisters on an inflamed surface, commencing, in most instances, on the right side of the abdomen. In some instances this band of vesicles extends down towards the groin, in others it passes upwards. It is very rare that this eruption occurs on the left side of the body.

"This disease bears a very close resemblance to erysipelas," and arises from a disordered state of the system. "Loss of appetite, lassitude, slight headach, nausea, more or less febrile irritation, together with scalding heat and tingling in the skin, and shooting pains through the chest and stomach, are the symptoms which usually precede the eruption."

The vesicles are transparent, until the fourth or fifth day, when they acquire a yellowish or milky appearance, and in the course of a day or two break, and form brown crust, and in a few days after, fall off. In some instances, the skin ulcerates and leaves scars.

Shingles very seldom attack any but young persons, and rarely, if ever, happen to children under three years of age.

Not dangerous.—Shingles are rarely dangerous. The eruption, however, occurring in a highly diseased or exhausted constitution, may be followed by dangerous consequences, from the supervention of gangrene.

Treatment of Shingles.—Little need be said in relation to the treatment of this disorder. The same local applications may be used, as recommended in erysipelas, and when the general health is much affected, an emetic to cleanse the stomach, will be proper. Mild stimulants to promote perspiration, composition, ginger, pennyroyal, &c. If the bowels require attention, use enemas. Lime water with milk, is good to correct the secretions where the stools are acrid or of a greenish cast.

The diet should be light, consisting of gruels, milk, toast and milk, elm gruel sweetened with loaf sugar, adding a portion of lemon juice. Cold drink, in moderate quantities, may be allowed the patient, of which lemonade is generally the most grateful. When the bowels are costive, a gruel made of unbolted wheat flour, has a good effect.

SECTION X.

SCALD HEAD.

This name is given to a certain form of eruption, which comes on the *head*. It commences with small ulcers, which discharge a humour that forms into thick crusts or scabs. In some instances, nearly the whole of the scalp becomes affected, forming a continuous mass or scab, attended with paroxysms of intolerable itching; and emitting an offensive odour. Sometimes the humour discharged is extremely acrid, producing an eruption wherever it comes in contact with the skin, and in this way, the disease not unfrequently spreads partly over the face, and extends down the neck to the back and shoulders. The glands about the ears are often swollen.

Scald head is occasionally met with in adults, though it is very generally confined to children, and unless correctly treated may continue even for years.

Treatment.—The most important point, in the treatment of scald head, is the exclusion of air from the parts affected. To accomplish this, cut the hair off close, and apply Thomson's healing salve, or an ointment, made of tar and suet; and put on a cap, either of bladder or of oiled silk. This will prevent the formation of scabs, though the discharge of matter will continue until the parts heal. The cap should be taken off every day, and the parts that suppurate cleansed. By gently pressing a dry cloth on the parts, the pus will adhere to it, and in this way be removed. Then apply fresh ointment, and put on the cap, which should be rubbed over on the inside, with tallow or oil, to prevent its adhering too closely to the salve or ointment.

The head should never be wet with any kind of wash, except occasionally, when the itching is very annoying, which may sometimes be relieved by washing with a strong tea or tincture of bayberry or sumac. A strong tea made of common soot also answers a good purpose.

Constitutional Treatment.—In bad cases a sweat and an emetic should be given every week or oftener, as the symptoms indicate. This will greatly facilitate the cure. Lobelia, given in small doses, is of especial benefit in all kinds of eruption. It may be given in pills, or in tincture, several times a day, in quantities merely sufficient to excite slight nausea.

The composition powder, mixed with sugar and warm water, should be taken once or twice a day, more especially, if the tongue

be coated. The bayberry or sumac tea, may be used for the same purpose.

The spice bitters, or any other simple tonic, may be used to strengthen digestion.

Costiveness may generally be relieved by proper articles of diet, as stewed prunes, gruel made of unbolted flour, with the addition of a few raisins, stewed figs, rye mush, roasted apples, and ripe fruit in season. The diet, of course is not to be confined to such articles exclusively.

There is a scabby eruption that prevails among children generally commencing back of the ears, and frequently spreading over the cheeks, and on the head, resembling scald head. This eruption is to be treated the same as scald head:—apply the ointment to exclude the air, keep the parts dry, and restore the general health by appropriate constitutional treatment.

The following preparation may be used in the place of the external application above-mentioned.

Liver of sulphur, three drachms,
Spanish soap, one drachm,
Lime water, eight ounces,
Rectified spirits of wine, ten drachms.

To be mixed and melted together, and applied to the affected parts night and morning.

After the complaint is cured, the head should be bathed every day with tincture of myrrh or lobelia to prevent a return of the eruption. On the first appearance of a return of the eruption, salve should be applied, and the parts excluded from the air; and, if the general health is bad, constitutional treatment should be resorted to.

Tar water.—Scaly eruptions on the face and other parts of the surface, may be cured in many instances, by simply washing the parts with tar water, two or three times a day.

SECTION XI.

TETTER.

There are various forms of eruptions, to which the name tetter is generally applied, all of which, however, depend chiefly upon a disordered state of the stomach and bowels, and require much the same kind of treatment.

That which is termed *dry tetter*, consists of red blotches on the skin covered with pimples, which itch very much. The eruption forms white scales, like fine bran, which fall off, leaving the skin apparently healthy. The eruption reappears and repeats the same operation as before, and in this way, will continue to disappear and reappear indefinitely.

Pustular Tetter.—In this variety, the eruption appears in clusters of small vesicles or blisters, containing at first a thin serum, which in a few days becomes yellowish, and breaking, form thin crusts or scabs, which fall off, leaving the skin, in many instances, in a healthy condition, except a slight degree of redness; occasionally the skin becomes excoriated. There is a sense of smarting, and sometimes pain attending the eruption. Not unfrequently the eruption reappears at intervals, and the disease this way may be prolonged for weeks or even months.

Corroding, or Eating Tetter, as it is called, commences with small painful sores or ulcers, which soon spread into large spots of various forms and sizes, and discharge a thin watery humour. This humour is sometimes so acrid, as to produce new sores wherever it comes in contact with the surrounding surface. This species of tetter, is apt to spread rapidly and occasionally forms deep ulcers which are difficult to cure.

Another Species.—There is another species of tetter, appearing in the form of hard, dry, red spots, usually about the size of a millet seed. This eruption is mostly observed on the face and neck, though in some instances, it extends over the whole body. Depending in general upon chronic derangement of some internal organ, especially torpor of the liver, and obstinate constipation of the bowels, it not unfrequently becomes a seated disorder, and to be cured only by revolutionizing the constitutional efforts of the system.

Treatment.—In some cases, the constitutional derangement or debility may be rectified by a change of habit. For instance, if the habits be sedentary, the patient should take exercise in the open air, especially after meals; and use especial care to keep the feet warm and dry. A change of residence from one part of the country to another, or from the city to the country, will, in many instances, cure long standing complaints, where medicine, without change of residence, may fail. To regulate the bowels, which are generally costive where this last species of tetter exists, I have used the purified charcoal in composition, or spice bitter tea, with general success. The dose of the charcoal, is a large teaspoonful three or four times a day. Two or three pills composed of lobelia and capsicum, taken at bed time, are useful also in regulating the bowels. The diet should be such as best suits

the patient's constitution, avoiding, however, hot bread, sweet cakes, fat or salt meat, or strong coffee. Bread made of unbolted flour, is proper in all cases of costiveness. Washing or sponging the body occasionally with salt water, as soon as out of bed, and using friction to the skin with the flesh brush, or a dry salted towel, will give tone to the nervous system, and increase the constitutional strength. The vapour bath, followed by the shower bath, may be used when the patient is too chilly to bear the washing with cold salt water alone. Exercise in the open air, cleanliness, and warm clothing, are of importance in all disorders of this kind.

An occasional course of medicine and the free use of bitters to restore digestion, may be necessary in effecting a cure in obstinate cases of tetter.

Treatment of the Dry Tetter.—There are various washes and ointments that may be used with benefit. The best, however, according to my experience, is a tincture of sumac berries in No. 6., or the third preparation of lobelia, to be applied frequently, and the parts anointed, especially at night, with Thomson's healing salve, tar ointment, or yellow dock ointment. An ounce of powdered yellow dock root, to half a pint of vinegar, forms a good external application for tetter.

If the patient require medicine, or if the eruption be not cured by the above applications, an emetic, or a course of medicine will be the surest means of effecting a cure. An occasional dose of composition may be sufficient to rectify the stomach and bowels in slight cases, or, what would be still better, a dose of the composition powder, taken in a strong decoction of bayberry.

Treatment of Pustular Tetter.—Salt water is a good wash in this and probably in other forms of tetter. The parts should be kept covered with salve or ointment spread on soft muslin or linen, and not exposed to the air except when necessary to wash and apply new dressings. Tetter may be found difficult to cure, unless protected from the air, and kept dry.

The constitutional treatment should be the same as in the former variety. In fine, there is no form of the disease in which the general Thomsonian remedies, such as composition, spice bitters, bayberry, or No. 3, &c., may not be used with advantage. Warm clothing, exercise in the open air, cleanliness, and a well regulated diet, are of importance in all chronic diseases.

Treatment of Eating or Corroding Tetter.—This variety of tetter demands a more active course of treatment, especially where there is a tendency in the disease to spread rapidly. A full course of medicine should be given and followed by the usual stimulants

and astringents, such as composition, ginger, capsicum and bayberry, in order to promote perspiration, and to correct the secretions of the stomach and bowels.

The yeast poultice, or a compound of white pond lilly, elm and ginger, wet with a strong tea of raspberry leaves, to be applied to the parts affected, and renewed at proper intervals until the ulcers assume a healthy appearance, when the salve or ointment may be used as recommended in pustular tetter.

There are various forms of eruptions of the nature of tetter, all of which should be treated on the same general principles.

In some instances tetter will spread over a considerable portion of the lower extremities, and sometimes over almost the whole of the body. A patient applied to me not long since, who had tetter over the whole surface of both legs, and the flesh was hard and swollen. The patient had been unable to sleep in bed for many months, on accouut of the tormenting itching, which came on at night, when covered in bed.

The treatment, in such cases, should be to regulate the general health by the vapour bath, and emetics; together with the continued use of the compound lobelia pills, composition and spice bitters; and apply poultices made of elm, white pond lilly, and ginger; and after the parts run, and the swelling subsides, some simple salve may be applied: and cover the parts with silk oil cloth, in order to exclude the air. When it is necessary to cleanse the parts, the oil cloth must be again reapplied, and not permanently removed until the disease is entirely cured.

SECTION XII.

ITCH.

This disease, it is said, is caused by an insect which penetrates the skin, and produces small vesicles or pustules, forming into scabs, and attended with an intolerable itching.

The wrists, and between the fingers, are the parts affected, though occasionally it is observed on various other parts of the body, excepting the face.

Treatment.—The sulphur ointment will cure the real itch, sooner, probably, than any other application. There are other remedies, which may be used with benefit, as frequently washing with salt water, or the preparation recommended by Dr. Thomson, which is spirits of turpentine, with about four times as much of No. 6: to be well shaken before applied.

Sulphur Ointment is made by rubbing together one ounce of the *flour of sulphur*, and four ounces of *lard*. This ointment is to be applied every night. It is recommended that a part of the body only be covered with the ointment at a time,—say one-fourth. The addition of a few drops of the oil of lemon will conceal the disagreeable smell of the ointment.

The following is said to be an effectual cure in this disease:—half an ounce of muriate of ammonia, mixed with two ounces and a half of water. The affected parts to be washed every day with the mixture.

Another preparation—mix together one drachm of sulphuric acid, and one ounce of lard, and apply the ointment.

SECTION XIII.

RING-WORM.

This name is applied to an eruption consisting of very minute vesicles, or blisters, closely compacted together, and which form a ring or circle. There is great diversity in the size of the ring, varying from an eighth of an inch to two or three inches in diameter. In the centre of the larger rings, the skin is of its natural appearance. "The eruption is always attended with a troublesome itching and tingling sensation." In four or five days the vesicles break, and form crusts or scabs, which, in general, fall off by the eighth or ninth day. In some instances, new circles of the eruption appear in succession for several weeks.

Treatment.—Ring-worm may be readily cured in most instances, by washing the part with the tincture of lobelia, or No. 6, and apply an ointment made of the narrow-leafed dock-root, grated and stewed in lard. The meadow-fern ointment is also a good application.

When the eruption proves obstinate under the above local application, it will be proper to use constitutional treatment. A dose of composition or spice bitters, two or three times a day, or, take a teacup half full of bayberry tea, and stir in it a teaspoonful of composition powder: sweeten, and take night and morning. Lime water in milk answers a good purpose, taken two or three times a day. A course of medicine, however, is the most effectual means of cleansing the system of all morbid humours.

An entire exclusion of air from ring-worm will mostly effect a cure in slight cases.

SECTION XIV.

CHAFING IN CHILDREN.

Fat children are liable to chafe about the neck and other parts, where the skin is doubled upon itself.

Treatment.—Apply scorched flour, or interpose a piece of muslin or linen slightly scorched, to absorb the secretions of the skin, which cause the excoriations.

Washing the parts with tar-water, will cure such sores in many instances. Scaly eruptions about the head may be cured by washing with tar-water. A strip of patent list, or a narrow strip of old soft muslin or linen, covered with tar ointment, and placed on the chafe where the skin is folded, will cure it.

Where the buttocks become excoriated, or break out in sores from an acrid condition of the stools, apply some soothing liniment, as a mixture of lime-water and sweet oil, and correct the secretions of the bowels by injections; and if the stomach be disordered, give an emetic. Prepared chalk, or lime-water, may be used with advantage, in correcting the acrid state of the secretions of the stomach and bowels. Lime-water is taken with boiled milk; and the chalk may be mixed in strong bayberry tea, and sweetened.

SECTION XV.

PRICKLEY HEAT.

Prickley Heat, as it is called, is believed to be caused by impurities in the blood, being thrown to the surface. Children are most liable to this eruption in very warm weather, and during the period of teething. Derangement in the digestive powers are in almost every instance the original cause of the complaint. The eruption is mostly confined to the neck, breast, and shoulders.

Treatment.—A few doses of lime-water, together with the use of the tincture of lobelia, in small quantities, merely sufficient to produce slight nausea, will, in general, correct the derangement in the stomach and bowels. But the eruption will continue in many cases until the teeth are through the gums, and the irritation has subsided.

Local Application.—Bayberry, or sumac tea, made very strong will allay the itching, adding a teaspoonful of the tincture of lobelia, to an equal quantity of the bayberry tea, frequently applied will cure the eruption.

It sometimes happens that the eruption strikes in suddenly and the child becomes very sick, in which case an emetic of lobelia in composition tea, will be proper, and injections administered prepared in the same manner as the emetic.

CHAPTER III.

DISEASE OF THE CHEST AND LUNGS.

SECTION I.

ACUTE BRONCHITIS.

The name bronchitis is applied to a diseased condition of the larger air vessels of the lungs. In severe colds the bronchial vessels are more or less diseased, sudden attacks of *bronchitis* are usually called "*violent cold*,"—a much more appropriate term than *bronchitis*, which signifies an *inflammation* of the *bronchial vessels;* whereas the disease is not necessarily accompanied with inflammation. Common sore throat, which is so frequently connected with colds, is not called bronchitis, unless the inflammation becomes seated and extends into the air vessels of the lungs.

Symptoms.—This disease is greatly diversified, both in character and symptoms. Generally there is, in the first place, great lassitude, chilliness, loss of appetite, much oppression at the chest, the skin cold, the face pale, and the head heavy. The breathing becomes more or less short, and sometimes difficult. The cough is mostly slight at first, consisting of a mere hack, and in some instances, dry; or the expectoration, in the commencement, is frothy or clear, and tough, like the white of an egg. In some instances there is no pain; in other cases, constant pain; and sometimes pain is only felt during the act of coughing. In most cases of bronchitis, there is more or less fever in the after part of

the day, and a paroxysm of coughing comes on at night. There is languor, headach, and dryness of the skin, and in some few cases, profuse perspiration. There is usually more or less hoarseness, and a wheezing, or rattling breathing.

In the young and plethoric, a strong reaction comes on early in the disease: the pulse is high; the countenance becomes flushed, and the breathing hurried. Whereas, in the aged and feeble, there is seldom much inflammation or fever, as the system is not able to establish and support an inflammatory action.

"Infants are especially liable to this form of disease. In them the disease manifests itself by a short, quick, oppressed and wheezing respiration; uneasiness on being placed in the recumbent position; slight cough, somewhat hoarse at first, but humid and rattling as the disease advances; *a uniformly pale, and anxious countenance*, pulse frequent and tense; skin above the natural temperature on the trunk, but the hands and feet are commonly cool, or at the regular temperature."

The disease, however, presents many grades of violence, both in the young and old. Sometimes the vital powers are in a sunken condition—there is low delirium, cold skin, weak pulse, blueness under the nails, and stupor.

Sometimes there are paroxysms of difficult breathing resembling that of asthma.

Causes.—Exposure to cold and moisture, is the most common cause of those violent colds, that medical men call acute bronchitis.

Favourable Signs.—Improvement in respiration, an easy expectoration of a thick yellow matter, and more especially when the secretions of the *nose* are restored; the stools of a natural colour; and a general warmth and moisture of the skin. It is in the acute form of the disease that the free expectoration of a thick yellow secretion is to be considered as particularly favourable, as chronic bronchitis is generally attended by such a discharge of matter and may continue many years.

Unfavourable Symptoms.—Great distress and oppression, cold skin; little expectoration and ropy, like the whites of eggs; tendency to stupor or delirium, and a dry nose. These symptoms, most of which frequently attend the early stage, are not to be considered alarming, unless where they continue to exist in a later period of the disease.

Distinguishing feature between Catarrh and Bronchitis.—Catarrh commences in the nose, and travels down, sometimes not reaching the lungs. Bronchitis begins in the lungs, and proceeds up.

Treatment.—Slight attacks of the disease, in general, require

nothing more than an occasional dose of the composition or pepper tea, with broken doses of lobelia; the use of a warm foot bath, and a strict attention to diet, and keeping the feet warm.

When the symptoms are more distressing, emetics will be proper: a full course of medicine is best in severe cases. The functions of the skin will be greatly assisted by the warm water bath, or vapour bath.

There is no plan of treatment upon which so much reliance can be placed, as courses of medicine. The practice of giving an emetic every morning before the patient rises, has proved successful in curing many cases, when the disease was deeply seated.

Expectorants.—In the early stage of the disease, or as long as the cough is hard and dry, or the expectoration resembles the white of an egg, the patient should be kept slightly nauseated with lobelia, given in broken doses, either in the form of pills, tincture, or infusion. There are other articles which may be used to ease the cough, and promote expectoration, such as a tea of bran, flaxseed, elm, or liquorice root, acidulated with lemon juice, and sweetened with honey, or rock candy; equal parts of olive oil, vinegar, and honey, stewed together, and taken frequently, in teaspoonful doses. Onions or garlic sliced and covered with sugar, and kept from the fire will form a syrup which answers a good purpose, more especially in patients of weak nerves. Carbonate of ammonia, given in hot wine whey, will afford great relief in cases of extreme oppression of breathing. When the bowels are costive, injections should be used. Lobelia administered in this way, in simple lukewarm water, sometimes excites an almost magic influence in equalizing the circulation, and counteracting the undue determination of blood to the lungs. The system kept under the influence of lobelia, the expectoration soon assumes a favourable aspect, except in very stubborn cases.

Capsicum.—In all cases of colds whether the disease be termed Bronchitis, or Catarrh, the free use of Cayenne pepper tea will be proper.

Comp. Lobelia pills are well adapted to the treatment of all cases, and in every stage of such complaints.

The Diet, in the early stage of the disease, should consist of light food, as barley water, tapioca, rice, sago, crust coffee, elm gruel, milk porridge, &c. The expectoration becoming copious and yellow, with other favourable symptoms, the patient may be allowed a more strengthening diet, as fresh beef, mutton, soft boiled eggs, stale bread, &c.

The expectoration presenting a favourable appearance, and the secretions of the nose restored, the quantity of lobelia may be lessened, and three or four times a day the patient should take a teacup half full of strong bayberry or No. 3 tea, adding a teaspoonful of composition powder, or half a teaspoonful of capsicum to the tea, or the composition or pepper may be taken in the usual way. The spice bitters may be used as a substitute for the composition.

An occasional emetic, or full course of medicine, will be proper at any stage of the complaint. Where the symptoms are violent, or the disease becomes protracted, a course of medicine will prove the most effectual means that can be employed. The course to be repeated daily until the disorder abates.

Balsam Copaiva is a valuable remedy in protracted cases of catarrh or bronchitis. The dose, for an adult, is from fifteen to twenty drops three times a day. It may be dropped on sugar, or rubbed up with a small portion of slippery elm powder and sugar, adding a few drops of some agreeable essence, and sufficient water to make it convenient to take. The modern plan of preparing the balsam in capsules, is still a better form for taking.

The *tincture of myrrh*, or *Thomson's No.* 6, may be used with benefit more especially in the latter stage of the disease, and where the patient is affected with flatulency, or oppression at the stomach after meals which is a proper time for taking it.

Night Sweats.—From the debility usually induced in protracted cases of bronchitis, night sweats are apt to occur. Under these circumstances, the medicine at bed-time should consist of a strong tea of the bayberry or No. 3, or when liquids oppress the stomach, the compound lobelia pills may be employed, and in the morning, the surface bathed with No. 6 or pepper sauce, avoiding exposure to cold air. The clothing to be put on perfectly dry. A flannel garment wet with salt and vinegar, dried and worn next the skin, is recommended by some experienced physicians to check night sweats. The vapour bath I have found of benefit in preventing night sweats in some cases. A very moderate temperature of steam, however, will relax the system. It should therefore be as hot as the patient can bear, washing the face and breast during the steaming with vinegar or spirits and water, and at the close the patient may be showered, rubbed dry, and the surface bathed with salt and vinegar. Depending, however, upon debility, it will be difficult, in many instances, to prevent night sweats until the system gains additional strength.

CHRONIC BRONCHITIS.

From repeated colds, unwholesome air, and improper diet; bad treatment, such as bleeding and active purging; confirmed dyspepsia, or other constitutional disorders, bronchitis is liable to become protracted for many weeks, or even many months, and to become a seated complaint. It then receives the name of chronic bronchitis.

To describe all the various modifications of symptoms which attend chronic bronchitis, would be a task difficult to perform, and of but little practical utility. The disease appears in every grade of violence, from a slight affection to that of a deeply confirmed, and sometimes incurable disease. A majority of the cases of consumption arise from neglected or badly treated catarrh, or bronchitis. Clergymen are extremely liable to an affection of the throat which is usually called bronchitis, or the clergyman's sore throat.

Symptoms in a well-marked case of Chronic Bronchitis.—A troublesome cough, and free expectoration; general debility and wasting of the flesh; short, oppressed, and wheezing respiration; paleness of the countenance, and blueness of the lips; chilliness in the early part of the day, followed by more or less hectic fever; night sweats, and extreme sensibility to cold; loss of appetite with tenderness and distress at the pit of the stomach; and an unhealthy condition of the stools; more or less pain in the side or chest, particularly on coughing; and an inability to lie on one side.

The symptoms, however, in chronic bronchitis vary accordingly as the character and circumstances of the case differ. Thus whilst in some cases the cough is frequent and harrassing, in others there is but little cough or raising, except in the morning. Night sweats and hectic fever, though common, do not always attend the complaint. The degree of derangement of the digestive powers varies greatly in different cases, and the condition of the digestive functions exerts a controlling influence over the disease of the bronchial vessels. In fine, it is upon the integrity of the stomach, that, in a great degree, depends the *cure* of the disease in the *lungs* and *throat.*

Stone and glass cutters are peculiarly subject to affections of the air vessels of the lungs, from mechanical irritation kept up by inhaling particles of dust.

Treatment of Chronic Bronchitis.—To correct the disordered condition of the stomach, promote digestion, and supply the lungs with fresh wholesome air, are especially indicated in the cure of chronic bronchitis.

Thomson's Course of Medicine is the most effectual means of cleansing the stomach and bowels; it also promotes the healthy functions of the skin, and the mucous membrane of the bronchial vessels. The course of medicine should be given as the circumstances of the case require. A very good rule to be observed is,—that so long as the patient has an appetite, and is getting better, to omit the course. Morning is the best time for giving a course of medicine in chronic diseases. The skin should be bathed with some stimulant after the last bath in the course. An emetic in the morning before rising, the patient previously drinking some composition tea, will answer, in many instances, the place of a full course. The lobelia emetic to be prepared in bayberry or No. 3 tea. The simple No. 3 tea, made strong, will sometimes operate as an emetic, and afford much relief to the patient.

Tonics.—The Peruvian bark, colombo, Virginia snake root, wild cherry bark, gentian, spice bitters, Thomson's No. 4 bitters, should be given either singly or combined, where there is much debility and night sweats, and not confine the patient to a particular kind, but keep changing. I have used the *elixir of vitriol* with decided benefit, in cases of night sweats; from fifteen to twenty drops may be given in a wineglass of a tea of Peruvian bark, or of some other tonic, and repeated three or four times a day. The bayberry or No. 3 should not be used at the time of using the Peruvian bark or elixir of vitriol.

Fresh Air.—In chronic bronchitis the patient should use moderate exercise in the open air as much as possible, with particular attention to keep the body and feet protected from the cold. There is an instrument recently introduced into use, called a *respiratory*, by wearing which the patient can go out in severe cold weather, and experience no inconvenience in the lungs from the cold. Recoveries from this disease are greatly facilitated by fresh air.

A change of residence, more particularly to a *pine* country, or to the sea board, provided salt air agrees with the patient, will, in many instances, prove of signal benefit.

Vegetable Balsams.—These are sometimes found of especial benefit in cases of chronic disease of the bronchial mucous membrane. The balsam copaiva, balsam tolu, and Canada balsam, are those generally employed. The balsam copaiva is considered the best; to be given at first in doses of from twenty to thirty drops, gradually increasing the quantity to fifty or sixty drops, and repeated three or four times a day. (The dose and mode of preparing the other balsams will be found in the Materia Medica.)

Astringents.—The bayberry or No. 3 in strong decoction, adding

a teaspoonful of No. 6, or a small portion of pepper, should be given as often as once a day, where the tongue is coated. A very good mode of preparing bayberry for taking is to rub the powder up with honey, and then add a portion of luke-warm water, or what is better, a tea of aspin, poplar, or some other tonic. Powder taken without being scalded, will make more impression upon the stomach than when taken in decoction. The No. 3 pills may be used in place of the above preparations, if the patient be averse to liquids.

The *purified charcoal* may be used with advantage where the bowels are costive.

Inhaling the smoke of cayenne pepper, though a harsh remedy, has in many instances been attended with the most signal benefit. It is applicable to cases of long standing. The proper mode of doing it is to put a small portion of cayenne pepper on a red hot shovel, the patient being covered with a blanket, to confine the smoke; or let the patient breathe the smoke whilst in a vapour bath. I recently met with a gentleman from Massachusetts who had been affected with a harassing cough, which continued for many months without any abatement, although he had been under treatment in a Thomsonian infirmary. At length resorting to the inhaling of pepper smoke, his cough was cured in a few days. This gentleman described the effect of the smoke upon the lungs to be at first almost suffocating, and very distressing, but in a short time the sense of suffocation passed off, perspiration became profuse, and the secretions from the eyes, nose, and mouth, ran copiously during the operation. The secretions from the lungs, in a few hours after the first operation, changed their aspect, and were raised easily, and the mucous membrane was speedily restored to a healthy condition. The inhalation of the smoke of pepper is adapted to cases of long standing, attended with profuse expectoration of yellow thick secretion, and where the substance of the lungs is not affected. It is where the mucous membrane of the air tubes in a weakened condition requiring the application of a powerful stimulant, in order to stimulate them to a more healthy action, that a recourse may be had to this severe application.

The External Applications proper for the chest, are stimulating liniments; mustard poultices or plasters; or strengthening plasters. Cayenne pepper strewed on the plaster will render it more efficient.

Diet.—The most nourishing kinds of food should be used, as eggs, custards, stale wheat bread, and all kinds of wholesome articles that may suit the stomach. Meats are allowable, unless they be found to disagree with the stomach, avoiding veal, fresh pork, sausages, and all food fried in fat. A milk diet generally agrees

with the patient, such as porridge, rice and milk, boiled milk and toast. Where the bowels are costive, a gruel made of unbolted wheat flour, or bread made of the same article should be used.

SECTION II.

PULMONARY CONSUMPTION.

The lungs are liable to various forms of disease, producing different varieties of consumption.

OF THE PRINCIPAL VARIETIES OF CONSUMPTION.

1st. *Tubercular Consumption.*—This variety of consumption commences with the formation of small roundish bodies (called tubercles) throughout the lungs; and as they increase in size, and suppurate, that part in which suppuration takes place is destroyed, or, the structure changed and rendered incapable of performing its natural function.

Tubercles, in the first place, are about the size of a millet seed, and generally are found in clusters or masses. There can be no doubt but that tubercles exist in the lungs of some persons for many years without increasing in size, or causing any considerable inconvenience to the patient.

Tubercular consumption prevails to a great extent in the United States and in Great Britain, and is of all the varieties of consumption the most difficult to cure. This form of consumption occurs, almost exclusively, in scrofulous constitutions, or in persons of an *hereditary* tendency to tubercles. There are few cases of this form of consumption that commence in persons rising forty years old, the disease almost exclusively occurring between the age of fifteen and thirty.

The Causes which usually bring on *tubercular consumption* in constitutions predisposed to the disease, are repeated colds, or catarrhs; disordered stomach and bowels; sudden check of perspiration after exhausting exercise; the introduction of antimony or mercury into the system;* the intemperate use of spirituous liquors; copious bleeding; excessive venereal indulgence; confinement in ill-ventilated apartments, and unwholesome food. If one

* Tubercles have been produced in the lungs of animals by giving them mercury by way of experiment.

or both parents be predisposed to scrofula, or tubercular consumption, all their children will be liable to pulmonary consumption; whilst in other instances, this hereditary disposition will exist in some of the children only; the rest being entirely exempt from it. Children are more apt to partake of the constitution of the mother than that of the father. There are instances, however, where both parents have been consumptive, and all their children robust and healthy; and then, again, both parents may be healthy, and their children delicate and consumptive.

Symptoms.—Tubercular consumption commences with a short dry cough, which may continue for many months without expectoration, except of small portions of glairy mucous. The breathing is short and oppressed, with a sense of tightness or uneasiness in some portion of the breast whilst taking a full inspiration. There is much debility, and a gradual wasting of the flesh; the appetite fails, digestion is impaired, and the patient is very liable to have a catarrh on the slightest exposure to cold or damp air.

As the disease progresses, emaciation and debility increase; the cough becomes more harassing, and the breathing shorter and more oppressed; night sweats occur, which leave the patient in an extremely languid condition. There is chilliness in the fore part of the day, followed by a flush on one or both cheeks, and a burning in the palms of the hands and soles of the feet. The tongue is usually coated with a thin white fur, or sometimes clean and of a pale pink colour. The symptoms just described may exist where there is no seated disease of the lungs. They often accompany dyspepsia, chorosis, and marasmus.

Sooner or later in the disease, the tuberculous masses become softened into the consistency of pus, and portions of the suppurated matter are discharged into the air vessels, and coughed up in the form of a thick yellow-like or greenish matter, assuming the character of genuine pus, and frequently streaked with blood. When this change in the character of the expectoration occurs, the cough, in some instances, becomes less distressing, but the general weakness increases, the flesh continues to waste, night sweats become more profuse, and usually there is a slight chill in the morning and towards evening. After the evening chill, hectic fever comes on, during which the pulse is seldom less than 120 per minute. In the absence of fever the pulse is soft, languid, and weak. As the disease advances, the expression of the countenance becomes changed, the eyes assume a pearly whiteness; the voice becomes weak and hoarse, or hollow; the feet swell, and a diarrhœa comes on, accompanied with rapid exhaustion; the mind is in many instances free from depression; and but little impaired until near the termination of the disease, when there is apt to be

some degree of delirium, and "occasionally total imbecility about a week previous to death."

Of other Modifications of Symptoms.—In some instances tubercular consumption runs its course with scarcely any prominent symptom of disease in the lungs,—there being no pain or difficulty of breathing, and but little cough or expectoration. There is a general wasting of the flesh; night sweats; failing of the appetite; the countenance is pale, and the flesh soft and flabby. Frequently, in these cases, there is more or less blood raised, and sometimes the lungs bleed freely. As the disease advances, however, the cough becomes more troublesome, with frequent inclination to vomit, and a rapid wasting of flesh and strength. The bowels are generally either much constipated, or relaxed; the nose becomes pointed and cold; the lips pallid or bluish; and the expression of the countenance is changed.

2d. *Bronchial Consumption.*—This variety of consumption which probably occurs next in frequency to the one just described, is seated in the mucous membrane of the air passages of the lungs and wind-pipe. *Chronic bronchitis* is the term usually applied to this form of disease, which from old age, bad digestion, neglect, or improper treatment, is apt to terminate in confirmed consumption. This form of disease is mostly confined to children, and to the aged. The general character, symptoms, and treatment are described under the head of *chronic bronchitis.* The great majority of the *cured* cases of consumption have been of this variety.

In some instances *chronic bronchitis* accompanies tubercular consumption, the two forms of disease being blended.

3d. *Consumption consequent on Pleurisy.*—From bad treatment, or under unfavourable circumstances, pleurisy is occasionally followed by the formation of an abscess in the chest, which is apt to produce ulceration of the lungs and thus cause pulmonary consumption.

The Symptoms which characterize abscess in the chest, are cough and difficulty of respiration; a sense of oppression or load in the chest on lying down; more or less pain and tenderness to pressure in the affected side; and above all, a dull sound given by *percussion on the chest.* These symptoms, together with the previous existence of pleurisy, will serve to distinguish the disease.

Sometimes the abscess ulcerates through the lungs into the air vessels, and is discharged by coughing. There are night sweats, hectic fever, and wasting of flesh and strength. After the abscess is in this way discharged, the patient may experience a mitigation of his sufferings, and occasionally there are recoveries; but more

frequently the disease terminates fatally, and sometimes death suddenly takes place.

4th. *Throat Consumption.*—This variety of consumption consists of ulceration of the throat and wind-pipe. It is usually rapid in its course, and when fully seated before proper treatment is applied, it is mostly fatal.

Cause.—Throat consumption is generally brought on by the neglect of repeated colds. Sometimes it follows measles and whooping cough.

Symptoms.—In the first place there is derangement of the general health, such as want of appetite, feeble digestion, cold and torpid bowels, a diminished temperature of the body, and extreme sensibility to cold. There is uneasiness and pain in the wind-pipe, which is increased by coughing; the patient frequently puts his hand to the throat, in consequence of the uneasy sensation in that part. The voice sooner or later becomes changed to a hoarse and feeble whisper. More or less pain is experienced in the throat on "bending the head backwards, or on turning it round." The cough is apt to be severe in the morning, and is almost always brought on by attempting to swallow. The expectoration is slight, in some instances, and in others it is copious.

When the disease is fully established, the countenance becomes pale, and the skin sallow; the flesh wastes rapidly, with chilliness followed by hectic fever towards evening, and profuse sweating during sleep: the mind is dejected and irritable, and there is a haggard expression of countenance.

There are cases in which the voice becomes indistinct, or entirely lost in catarrhal affections, and still the patient continues to enjoy good health.

Persons in full health, on reading over the symptoms of consumption, often imagine themselves to have the disease, when their lungs are not in the least affected.

Treatment of Consumption.—In tubercular consumption, even Thomsonian treatment, unless applied very early in the complaint, and under favourable circumstances, will seldom effect more than a mitigation of the symptoms, and in some degree check the progress of the disease. There can be no doubt, however, that in some instances where tubercles exist in the lungs, that by strict attention to the preservation of the general health, and a judicious use of medicine, when required, that these tubercles may continue for many years without being farther developed, and even permit the patient to live to an old age.

The general indications of treatment are—to correct the stomach

and bowels with an occasional *course of medicine;* to promote the secretions by a continued use of lobelia in broken doses; to sustain the circulation, and maintain a determination to the surface by the use of pure stimulants, such as capsicum and composition, assisted by an occasional vapour bath; together with frictions on the surface with the flesh brush, horse-hair mits, or salted towel; stimulants to the skin, as pepper sauce, or stimulating ointments; and warming plasters on the breast, or between the shoulders.

Fresh Air.—In the early stage of consumption the patient should seek the open air as much as possible, or at least should avoid small and tight rooms. Where a stove is used to warm a room, there should be a basin of water kept on it constantly, to prevent too much dryness. Even in severely cold weather, patients may take the air, wearing over the mouth the instrument called a *respirator*, which being kept warm by the breath, increases the temperature of the air that passes inwardly, and thus renders it more it should be avoided. Some patients, however, are so extremely sensitive to cold that they cannot bear the open air, except when the weather is warm. If a patient should generally feel worse for being in the open air suitable for weak lungs.

Ramadge's Tube.—Of the utility of this instrument in the cure of consumption, I cannot speak from my own experience or observation, the practice having been but recently introduced. But from the testimony of those who have made repeated trials of it, I cannot doubt of its utility in the early stage of tubercular consumption, and more especially as a means of preventing consumption in those who are predisposed to the disease.

The Rev. Mr. Howe, who first introduced this tube into use in this country, asserts, that the use of the instrument a few months, will occasion so great an expansion of the chest and lungs, as to enable the patient to take in double the quantity of air than before using it. If its effects be such as here stated, it will constitute at least one of the surest means of preventing tubercular consumption.

The construction of the Ramadge tube is such as to admit only a very small quantity of air at once, which occasions the patient to use considerable effort in order to get a supply of air to the lungs. The breath is then to be forced out through the tube, which again requires extra exertion on the part of the muscles of the chest; and the retention of the air in the lungs it is said will occasion the gradual enlargement of them. The use of this tube would be injurious in the latter stage of consumption, or where the heart is diseased.

Tubercular consumption, except in its incipient stage, is gene-

rally incurable, yet there are instances in which, after the tubercular matter is discharged, the cavity in the lungs becomes cicatrized, and the patient is restored to health.

Treatment of Bronchial Consumption.—The character and symptoms of this form of disease are described under the head of chronic bronchitis. A vast majority of the cured cases of consumption have been of this variety,—the disease being seated in the mucous membrane of the bronchial vessels. This disease, though greatly under the control of medical treatment, frequently does, under unfavourable circumstances, prove incurable: as when it occurs in persons far advanced in life; or when the constitution is vitiated by intemperance.

Confinement in the foul air of ill-ventilated apartments; an unwholesome diet; and frequent careless exposure of the feet to dampness, are also unfavourable to the cure of the disease.

The course of treatment laid down for chronic bronchitis, will be proper in this variety of consumption, the latter being an aggravated or long continued disease of the mucous membrane of the bronchial vessels.

The *course of medicine* must be repeated at proper intervals, as the symptoms demand. Preparations of lobelia—the tincture or pills—taken in small doses, and repeated several times a day. Where the expectoration is profuse, bitters should be taken to assist digestion and sustain the strength, and not confine the patient to any one preparation of tonics, but occasionally change them.

The No. 3 pills should be taken at bed-time, in the place of decoction of bayberry, where there are night sweats. In case liquids oppress the patient, all medicines may be given in the form of pills. Quinine is a good tonic, and is very readily made into pills; the No. 3 pills form a substitute for the bayberry tea; and the lobelia and capsicum may also be given in pills. It must be recollected that the No. 3 pills and quinine should not be given at the same time: one of them, however, may be used in the fore noon, and the other in the evening. The conserve of hollyhock may be used as a mild stimulant, tonic, and expectorant.

Inhaling the smoke of burning pepper, unless the case be very deeply seated, promises much in the cure of this form of consumption.

For directions in relation to diet and regimen, and the use of balsamic and other remedies, the reader is referred to the treatment of chronic bronchitis.

In Consumption from Chronic Pleurisy, the same general plan of treatment should be adopted as in the former varieties, namely, —to cleanse the stomach and bowels, and promote a healthy action of the general system by an occasional *course of medicine;*

broken doses of lobelia as an expectorant, and also to lessen morbid excitement; the No. 3 pills, or a strong decoction of bayberry once or twice a day to prevent the accumulation of morbid secretions on the mucous coat of the stomach; the vapour bath to promote the action of the skin, and assist in equalizing the circulation; stimulants and tonics to restore and sustain the digestive and nutritive functions; and injections to relieve the bowels when required. In this form of consumption, or where there is evidence of an abscess in the chest, to inhale the pepper smoke would be of doubtful utility.

Throat Consumption requires a plan of treatment similar to that required in chronic bronchitis.

Persons experienced in sounding the chest with the stethoscope, and by percussion, may sometimes form by these means a pretty accurate judgment of the character and extent of disease of the lungs. As this method, however, requires long experience and much tact, in order to distinguish by it the character of the disease, it will be useless to recommend it in a family work, more especially as it is of no utility in the cure.

As the same general or constitutional treatment may be applied with safety to all diseases of the chest, any anxiety on the part of the patient, or friends, or practitioner, respecting the peculiar forms which these diseases may assume, may be dispensed with, and these general directions with regard to the treatment persisted in. Even diseases of the heart have been cured by Thomsonian courses of medicine, with proper attention to diet and regimen.

SECTION III.

ASTHMA, OR PHTHISIC.

Asthma is a disease of the organs of respiration, generally occurring in fits, or paroxysms.

In some persons, the *predisposition* to asthma is induced. In others it is *hereditary*, beginning its attacks in childhood, and occurring at intervals through the whole course of a long life. Sometimes children will be affected with phthisic for a few years, and as they advance in age, become entirely free from its attacks. Although asthma may occur at any age, still those who are past the meredian of life are most liable to it.

The Season of the year in which Asthma occurs, varies in diffe-

rent individuals. Thus whilst in some the attacks are principally confined to cold and damp weather, others are only liable to it during mid-summer. Others again may have it during any season.

Causes.—Asthma is in general a disease of enervation,—a deficiency of the nervous power which governs the function of respiration. Hence it may be brought on in a person predisposed to the disease, by any cause that tends to weaken or impair the nervous influence, such as exposure to cold and dampness; inaccuracies in diet; over exercise or fatigue; venereal excesses; and certain electric conditions of the atmosphere. The disease, in the great majority of instances, is associated with feebleness of digestion. Absence of day-light depresses the nervous powers, and this will explain the cause why the disease generally comes on at night, and *subsides* on the approach of *day-light*.

Asthma, in some instances, arises from organic disease of the heart. In other instances, a mere functional derangement of the circulating organs, will occasion an attack; and on the other hand, an attack of asthma will be attended by palpitations of the heart, which entirely subside as the paroxysm of asthma passes off. Asthma may be considered in general as a *secondary* affection, the *primary* seat of the disease being in the stomach.

Not a Fatal Disease.—Asthma seldom proves fatal, though in some cases, it is extremely difficult to cure. When connected with organic disease of the heart, it may prove fatal at any time.

Symptoms.—Asthma is characterized by a sense of tightness across the chest, great difficulty of breathing, and a distressing sense of suffocation. It is seldom accompanied by fever.

An attack of this disease is generally preceded by a sense of weight and fullness at the pit of the stomach, sour eructations, heartburn, flatulency, weight over the eyes, and itching of the skin. When the paroxysm comes on during sleep, the patient is apt to have frightful dreams, and to wake up in great distress, with a sense of tightness through the breast, great difficulty of breathing, and a short dry cough. "These symptoms soon acquire a most appalling degree of violence. The breathing becomes wheezing, extremely laborious, gasping and suffocative; the countenance is expressive of intense anxiety and distress, and the heart usually palpitates violently. The desire for fresh air, in very violent cases, is inexpressibly urgent; the patient insists on the doors and windows being thrown open; and is totally unable to remain in a recumbent posture. The extremities are generally cold and the skin moist and clammy; the face is bloated and livid, or pale, and the veins of the neck hard and turgid. After these symptoms have continued for an indefinite time, the breathing becomes less laborious

and anxious, and towards morning a copious expectoration of viscid mucous generally ensues, which always brings with it considerable relief. During the ensuing day the patient usually feels but little oppression or uneasiness in the chest. On the next night, however, the paroxysm of suffocative respiration returns; and in this way the disease proceeds, with remissions by day and exacerbations by night for three or four days in succession, and in some instances much longer, before it finally subsides."

Paroxysms of asthma may occur at any period of the day or night, though they usually come after midnight. In some instances they continue without any complete intermissions of the difficult breathing, for several days or even weeks, but *always* worse at night.

Treatment of Asthma.—In many instances, where the attack is slight, the tincture of lobelia given in composition or pepper tea, and placing the feet in warm mustard water, will be sufficient to afford great relief, and sometimes will overcome the symptoms.

The Vapour Bath.—I have found the vapour bath not only to assist in breaking up paroxysms of asthma, but in many cases almost indispensable, as the emetic in some instances will not operate effectually previous to the vapour bath being administered.

The Hot Air Bath from Burning Alcohol.—When the skin is cool and inclined to moisture, the hot air bath will answer as well, and be attended with much less trouble than the steam bath, more especially in hot weather, when fire is not required in sick rooms.

The stimulating liniment, pepper sauce, or No. 6, should be applied over the surface after the bath. Previously to applying the stimulant to the surface, let the patient be showered, or washed over with spirits or vinegar, and then rubbed dry.

Emetics.—These are the most effectual means for the cure of asthma. To prepare an emetic, infuse the brown lobelia in a strong decoction of bayberry tea, the patient having taken previously of pepper or composition tea, or let some capsicum be added to the emetic; this should be taken in the usual doses, and repeated as often as necessary. The more the patient becomes relaxed, the greater in general will be the relief. In place of the above compound, the liquid of the third preparation of lobelia, may be used for the emetic, or a combination of the lobelia powder with the third preparation.

A Course of Medicine given in the evening, or before the time the asthma comes on, or as soon as the first symptoms arise, indicating its approach, will in general, keep off the paroxysm, or

at least greatly moderate its violence. The tincture of lobelia will often fail in bad cases, of making sufficient impression on the stomach; but the brown powder, or the third preparation, I never knew to fail in relieving the most severe paroxysms of asthma.

Injections.—These are important in the treatment of asthma, and, in some instances, will afford instant relief. Lobelia administered in this way, and retained, will relax the system as effectually as when taken into the stomach, and generally will excite free vomiting.

The Skunk Cabbage answers a good purpose in many cases of asthma, though in general far inferior to lobelia.

Treatment during the remission or interval between the paroxysms.—Broken doses of lobelia, either in *tincture* or the *compound lobelia pills*, together with an occasional dose of composition or pepper, will often be sufficient. Where the disease becomes protracted, however, and the system is in a feeble condition, *tonics* will be useful. Bonesett tea, taken cold, I have found to be decidedly useful in some cases. The scutilaria or scull cap, may be used as a tonic, and answers as a nervine.

English Garlic operates as a stimulant on the nervous system, and is therefore well adapted to cases of asthma, more especially where the disease being protracted, requires occasionally a change in the medicine. Let the patient chew and swallow a clove of the garlic every morning before breakfast.

Stimulating applications to the surface.—In asthma the skin is usually below its natural temperature, and inclined to moisture. Where this condition of the skin prevails, the stimulating liniment, No. 6, or pepper sauce, should be applied over the surface before going to bed. A plaster of the stimulating liniment spread over a piece of bladder or silk oilcloth, and bound on the pit of the stomach, will have a tendency to prevent the occurrence of the paroxysm. The same application may also be applied to the soles of the feet.

Diet.—The first symptoms, in many instances, on the approach of an attack of asthma, are, an unpleasant sense of weight, or stricture, and coldness at the pit of the stomach; and this frequently occurs soon after eating The stomach not being able to digest what had been taken, is oppressed, and asthma follows as a consequence of that condition of this great central organ. As long as the patient is liable to the attacks, especial care should be observed to avoid any article of difficult digestion, more especially

at the evening meal. Where the patient craves acids, the pepper sauce, or lemon juice and sugar, will frequently be grateful to the stomach, and favour expectoration.

A Cold Shower Bath every morning, by giving tone and vigour to the nervous system, will often prove especially useful in asthma, more particularly in hot weather. It may also prove a preventive to the disease. A dash of cold vinegar upon the breast will sometimes afford relief during the paroxysm, by producing reaction.

SECTION IV.

SUMMER CATARRH, OR COLD—HAY FEVER.

There is a catarrhal affection of the mucous membrane, extending from the nose to the lungs, which comes on in warm weather, and in some persons it occurs periodically every summer. It is a disease of *enervation;* consisting essentially in *deficiency of nervous energy.*

The dust from fresh dried hay is very apt to bring on the disease in those predisposed to it, and from this circumstance it is in some places called "*hay fever.*" Other kinds of dust, however, will have the same effect.

In some delicate persons the slightest exposure to cold or damp air, will occasion catarrh. Dr. J. K. Mitchel mentions the case of a female who would invariably be seized with a catarrh from taking hold of a tumbler of cold water.

Symptoms.—At first there are symptoms of indigestion, and a sense of fulness in the head. There is watering of the eyes, and the nose discharges copiously of a thin secretion. A cough generally comes on, and an expectoration resembling that which attends ordinary colds.

Treatment.—*Tonics* are particularly indicated. Colombo, gentian, Virginia snake root, bayberry, xanthoxylum, balmony, and poplar, may either or all be employed.

If the tongue be coated, or there be other symptoms of a foul stomach, a strong decoction of the bayberry should be taken as often as once a day, and if this be ineffectual, an emetic may be administered. The surface of the body should be bathed occasionally with some stimulant, as pepper sauce, or No. 6.

Eating raw onions relieves the symptoms in most cases.

As a preventive, use the shower bath, or sponge the body with cold water every morning for a few weeks before the time at which the disease usually comes on.

SECTION V.

WHOOPING-COUGH.

This disease is contagious, and occurs but once in the same individual. It is almost exclusively confined to childhood, and generally prevails as an epidemic.

This, like most contagious diseases, runs a certain course, or succession of stages, constituting its "rise, progress and declension." In some instances, however, the disease may be cut short by medicine; in others the disease will continue longer than the usual period, notwithstanding the treatment may be thorough and applied with judgment.

Whooping-cough is seldom fatal, except when under unfavourable circumstances, as in weak and delicate infants a few months old, or when it attacks children of scrofulous constitutions. Under these circumstances it is liable to be followed by consumption, or other forms of disease of serious character. Where the disease commences in the autumn, the cough is apt to continue until the succeeding summer.

Symptoms.—The disease commences like an ordinary cold or catarrh, with languor, sneezing, hoarseness, cough, and occasionally oppression in breathing. The bowels are usually costive, the appetite bad, and digestion impaired. The tongue is mostly contracted and pointed, and of a darker colour than natural, and is in most instances nearly clean, or very slightly coated. The cough is mostly dry during the first three weeks.

About the end of the third week the spells of coughing continue longer, they are more severe, and are attended by the peculiar sound called whooping. During the paroxysm of coughing the patient can scarcely get breath, occasioning a distressing sensation of suffocation, and the face becomes suffused with blood. The fit of coughing may last from half a minute or less, to four or five, or even ten minutes. Usually, after the third week from the commencement of the whooping, there is a copious discharge of a viscid mucous, after a spell of coughing. Sometimes vomiting occurs whilst coughing, which frequently affords great relief to the patient. In very aggravated cases, children are sometimes thrown into con-

vulsion fits, from congestion of blood in the brain, occasioned by the violence of coughing, and the suspension of breathing during the paroxysm.

After the expectoration continues free for a week or two, the paroxysms of coughing in many instances begin to decline both in frequency and violence; whereas in other cases the disease continues for six or eight weeks before there is any abatement in the violence of the cough.

Treatment of Whooping-Cough.—Throughout the entire course of the disease the treatment should be regulated in accordance with the nature of the case. Nauseating doses of lobelia promote expectoration—generally relieve the cough—quiet restlessness, and promote the secretions of the skin. In bad cases, where the breathing is much oppressed, or the patient is very restless, an emetic will be proper. The vapour bath will assist the operation of the emetic. A *course of medicine* will in some instances cut short the disease.

Injections must be used when the bowels are costive, or otherwise disordered. Lobelia administered in this way, in lukewarm water, and retained ten or fifteen minutes, will have a decidedly beneficial effect, especially where there is an undue determination of blood to the head or lungs. Under its influence the circulation becomes more equalized; the system becomes relaxed; and very often free vomiting is produced.

In the more advanced stage of the disease, where the secretions become profuse, attended with severe fits of coughing, which come on periodically, an emetic or an injection, as above described, administered previously to the time at which the paroxysms of coughing commonly occur, will mitigate the cough and favour the expulsion of the viscid mucous from the lungs.

Cough Medicines.—Liquorice-root tea; flaxseed tea, with lemon juice; a mixture of honey with sweet oil; onion or garlic syrup, are all good for the cough. The tincture or syrup of lobelia, however, is the best expectorant, and may be used in combination with any of the above-named articles.

The yolk of a fresh egg, beat up with 2 or 3 teaspoonfuls of sugar, and a teaspoonful of it given at a time, and repeated frequently, will moderate the violence of the cough in some cases, more especially in the later period of the disease.

Stimulants are more particularly indicated in the advanced stage of the disease, where the appetite is bad, and the system in a feeble condition. A small portion of the composition powder in a wineglass of bayberry tea, and administered once or twice a day, will cleanse the mucous membrane of the stomach, and also furnish a stimulous to the vital powers of the system.

. The comp. Lobelia pills will supply the place of all other medicine in ordinary cases, when the patient can be induced to swallow pills.

It sometimes happens that the cough is protracted as a consequence of want of vital power. In such cases *tonics* should be used such as spice bitters, Virginia snake root, chamomile, colombo, &c.

Haarlem oil.—Five or six drops of Haarlem oil given in a teaspoonful of boiled milk three or four times a day, will be useful in many cases of whooping-cough, more especially, in the latter stage of the disease. For adults the dose should be increased to 20 or 30 drops.

Oil of Amber.—This oil rubbed along the spine, morning and evening, will prove serviceable in allaying the violence of the whooping-cough.

The Cold Bath, if the patient remain in a feeble condition, after the whooping-cough, will have a signal influence in toning the system. It is safer to commence with the tepid bath, with the water at about 90 degrees, and gradually diminish the temperature as the patient can bear it. The patient should be suddenly dipped, or showered, and immediately rubbed dry, and wrapped in a warm blanket. The proper time for administering the bath is in the morning.

Change of Air.—To move from the city to the country, or from the country to the city; or even a change of residence in the same neighbourhood, will sometimes speedily cure the lingering cough and debility which is apt to follow whooping-cough.

SECTION VI.

PLEURISY.

Pleurisy is an inflammation of the membrane that lines the internal surface of the chest, which is called the pleura. This membrane also forms the *external* coating of the lungs.

Any portion of the pleura is liable to become diseased, but that on the right side is more commonly affected.

It is asserted by medical authors that pleurisy mostly attacks the robust and plethoric, but under my own observation the disease has occurred almost exclusively in the dyspeptic, the feeble, or the intemperate.

Under Thomsonian treatment, pleurisy is seldom fatal, unless

complicated with extensive derangement of some important organ; or when it attacks age or debility, or vitiated constitutions.

Causes.—Exposure to wet and cold; sitting in a current of air, or in a cold room, after severe fatiguing exercise, or sleeping in damp sheets, are common causes of pleurisy. Persons are often liable to be attacked with the disease after severe surgical operations.

Symptoms.—An acute or lancinating pain in the side of the chest: hurried and painful breathing; a short dry cough, attended with slight expectoration of a glairy and almost colourless phlegm, are the symptoms which characterize pleurisy. The pulse in general is hard and frequent; the face flushed; the tongue coated; the skin dry and hot; and the urine scanty and high-coloured.

The symptoms, however, in this, as in other forms of disease, are modified by the various circumstances under which the disease may occur, as the age of the patient, the strength of the constitution, the extent of derangement of important organs, especially of the stomach and liver; or the degree of susceptibility of the lungs to become affected. Thus in the young and vigorous the reaction is apt to be strong, whilst in the aged and feeble the countenance may remain pale, and the pulse weak. In some cases the breathing is greatly oppressed, whilst in others there is but little oppression, and no pain. The cough which is usually harassing, is almost wanting in some instances. The expectoration, though in general colourless in the commencement, is occasionally tinged with blood, from the first, and when the disease extends to the substance of the lungs, the expectoration is mostly copious, and consists of a ropy mucus, mixed with blood. The condition of the stomach modifies also the character of the symptoms, and influences, to a great degree, both the violence and the duration of the disease. The liver being torpid, or the flow of bile obstructed, the skin and eyes become yellow, or the countenance presents an appearance of a "sickly mixture of red and yellow." Such a case would be called Bilious Pleurisy.

Inflammation of the pleura is very liable to produce adhesions between the side of the chest and lung, an occurrence, however, not productive of danger, and seldom of much inconvenience. But under unfavourable circumstances, an abscess is sometimes formed, which is always attended with more or less hazard to the patient.

Favourable Signs.—A free expectoration of a thick yellow matter; an increased flow of urine, which on standing deposits a sediment; a general and warm perspiration, together with an abatement of the pain and oppression, indicate a favourable termination of the disease.

The unfavourable signs are, an increased pain and oppression; the cough continuing dry, or the expectoration resembling a dirty mixture of blood and water; a sense of suffocation, and a sudden raising up in bed, or a "constant effort by the patient to bare the breast and to raise his head and shoulders;" a weak and irregular pulse; a livid appearance of the lips and countenance; a sense of burning on the surface and coldness internally, together with a rattling in breathing, and a tendency to delirium or stupor. These symptoms though indicative of great danger, should not be considered as necessarily of fatal omen, for recoveries occasionally happen after symptoms of the most alarming character have been presented.

Slight attacks of pleurisy will, in general, require nothing more than warm teas, and small doses of lobelia, together with the vapour bath or foot bath to excite persiration, and the patient kept warm.

When the symptoms are more violent, the patient should be kept under the influence of lobelia given in broken doses, and an occasional injection in very severe cases, composed of a teaspoonful of lobelia in tincture or powder, in lukewarm water, and retained some minutes. An occasional dose of composition or a tea of bayberry and pepper should be given to assist in maintaining an equilibrium of the circulation, and to excite and correct the secretions of the stomach.

The Vapour Bath is of great advantage in pleurisy. When the patient's strength will not permit his sitting up, the vapour can be applied in bed, and in this way continued for hours, if necessary.

An emetic must be given occasionally after a vapour bath, or whilst the patient is in a perspiration by other means.

A dry heat should not be applied around a patient when there is much fever, as it will increase the distress, before perspiration is induced.

A warm poultice applied to the side, will, in many instances, be attended with an immediate mitigation of pain. The poultice may be made of Indian mush, well boiled; or of boiled potatoes mashed; or slippery elm and flaxseed stewed together. A portion of ginger should be added to the poultice, and when spread, the surface covered with powdered lobelia. The poultice should not be allowed to get cold, but be kept warm by means of a hot brick, or a jug of warm water placed in contact with it.

Bilious Pleurisy, as it is called, usually commences with the symptoms of ordinary bilious fever. This and every other variety

of pleurisy, however, must be treated upon the same general principles. In bilious pleurisy the course of medicine should be more frequently repeated than in simple pleurisy. If the patient have vomited freely, and the stomach continues a long time unsettled, throwing up every thing that is taken, then the purified charcoal will be likely to prove serviceable in settling the stomach. It may be given in pepper tea, or any other of the teas used as medicine, and the dose repeated every hour, or every few hours, as may be deemed necessary.

The diet, during the active stage of the disease, may consist of the lightest kind of food, as elm gruel, barley-water, crust coffee, arrow root, gum arabic water, or flaxseed tea, sweetened with honey.

As the disease subsides, the quantity of lobelia may be lessened, and the patient allowed more nourishing food, as essence of beef, boiled chicken, oysters, milk porridge, wild game, &c., with stale bread and good tea or coffee.

In some instances the treatment will require to be continued several days before an abatement of the disease be perceptible. The expectoration of a thick yellow matter is one of the first, as it is also one of the surest indications of a favourable change being about to take place.

Some medical writers state, that an increased oppression of breathing and suppression of expectoration is apt to occur in pleurisy about the fifth or sixth day.

In cases of extreme prostration, from constitutional debility, or long continuance of the disease, a free use of wine whey will be proper, with five or ten grains of carbonate of ammonia added to a wineglassful of the whey, and this dose given every hour or two, as the symptoms may indicate, in connexion with capsicum and Virginia snake root tea—and if the cough be dry, or the expectoration scanty, or of an unfavourable appearance, the lobelia should be used in connexion with the above articles.

Tonics—Such as spice bitters, colombo, Virginia snake root, &c., are indicated where the patient remains weak after the disease has formed a crisis, and the fever has subsided. A dose of composition or bayberry tea should be taken once or twice a day during the convalescence, until the tongue becomes clean and of a healthy appearance.

SECTION VII.

CATARRH—COMMON COLDS.

Catarrh, or common Colds, prevail to a greater extent than disease in any other form. At particular seasons, especially in the spring and winter, when south winds prevail, the majority of persons exposed to the weather will be more or less affected with catarrh. Not only do catarrhal affections prevail more during the general thaws of spring and in open winters, but other forms of disease also prevail, to a much greater extent during those seasons when the atmosphere is chilly and charged with moisture, and damp from rain or from the thawing of frozen earth. The majority of cases of consumption originate from neglected colds, contracted during winter and spring. There is scarcely a form of disease that may not be produced by exposure to cold and dampness. Even contagious diseases, such as scarlet fever and measles, are much more common during winter and spring than at other season of the year; and in many instances children are taken down with a contagious disease from certain conditions of the atmosphere, without their having been exposed to any one affected with the disease.

Catarral Affections, like other forms of disease, arise from a loss of heat, and diminution of the nervous energy. When south winds prevail during spring and winter, the atmosphere is highly charged with moisture, which condenses on the walls, and thus renders houses damp and unhealthy ; the clothing of those exposed to the weather becomes damp, which, together with exposure of the feet to the wet ground, will almost necessarily occasion more or less disorder of the system. When the nervous energy and heat of the system is reduced, digestion is enfeebled, and in proportion as the digestion is lost, will the system lose its power of generating heat. Hence, "other circumstances being equal," a cold will be protracted in proportion as the digestive powers are weakened. Dr. Franklin used to say that he could bring on a cold by over eating. When the stomach is oppressed, less heat is generated in the system, and necessarily predisposes the person to take cold.

Symptoms.—Most of the symptoms attending ordinary colds, are such as usually prevail in the first stage of almost every form of disease; such as lassitude, chilliness, furred tongue, loss of appetite, torpid bowels, and a dry skin. There is usually more or less cough, which is dry at first, but when the cold is on the decline a free expectoration of a yellow secretion takes place. The secre-

tions from the nose are thin and watery at first, but become thick and copious as the disease abates. Extreme soreness of the throat is very common in colds, attended with dryness of the parts, and pain on attempting to swallow. The breathing is greatly oppressed in some instances, and but slightly so in others. Generally more or less fever comes on in the after part of the day, and the patient is restless at night.

It is useless in a practical point of view to make a distinction between bronchitis, catarrh, and colds in general, for the same plan of treatment is demanded in all these various modifications of disease; the treatment to be adapted to the symptoms without reference to names of disease.

Favourable Symptoms.—Cleaning of the tongue; a free expectoration of thick yellowish, or cream-like mucous; the discharge of thick secretions from the nose; a tendency to perspiration, and a returning appetite, indicate a favourable and speedy termination to the cold.

Treatment.—Ordinary colds require nothing more than an occasional dose of composition, capsicum tea, or simple herb teas, such as of pennyroyal and dittany, and a strict attention to diet, and care to avoid exposure to cold or dampness.

Where patients are exposed to the open air, while engaged in their usual avocations, or to sudden changes of temperature, the hot medicine, such as capsicum and composition powder, should be taken in cold water. Taking freely of hot teas will open the pores of the skin, and may render the patient, at the time, more liable to take fresh cold, if exposed to dampness, or a current of cold air. Still, perspiration induced in this way does not render the system so liable to cold as when it is brought on by severe exercise. Where the patient is in bed, or not exposed to the cold air, hot teas should be taken to promote perspiration, assisted by warm applications to the feet. Simple teas of pennyroyal, dittany, or chamomile, are beneficial, and may be drank freely, to induce perspiration.

When liquids oppress the stomach, the compound lobelia pills will answer as a general medicine.

Where the cough is hard and dry, the patient must be kept slightly nauseated with lobelia, and cough mixtures employed, such as flaxseed or elm tea, with the addition of a portion of lemon juice and loaf sugar; onion syrup; bran tea; lemon juice with loaf sugar; or liquorice root tea.

For sore throat wrap a stocking around the neck on going to bed, and keep the neck warmly covered at all times. Molasses and butter melted together, adding a portion of cayenne pepper, taken at bed time, will be useful in sore throat.

When the cough continues dry and hard, and the breathing oppressed, a course of medicine ought to be given, and the same repeated at proper intervals, until the symptoms become more favourable.

Of the Consequences of Colds.—There is scarcely a form of disease that is not in the majority of instances, occasioned by "*taking cold.*" The origin of almost every case of pleurisy, may be traced to a loss of heat and nervous power, either from exposure to cold and dampness, or from a loss of digestion by intemperance in drinking, or overloading the stomach with food difficult of digestion; in which case the power of generating heat will be diminished in the same proportion as the stomach is oppressed, or its powers enfeebled.

In fine, the first symptoms in every acute disease, are such as indicate a loss of heat and nervous influence, and reason teaches that the treatment should be directed to restore the natural heat of the system, the loss of which occasions the disease. Whether a disease be brought on by exposure to cold and dampness, or be occasioned by an oppressed stomach, which lessens the power of *generating* heat, the indications for the treatment are the same. Exposure to cold and dampness, by abstracting heat and nervous power from the system, enfeebles the action of the stomach, and thus lessens the heat-producing power: the appetite becomes impaired, and the patient is affected with lassitude and chilliness; and disinclination to corporeal or mental exertion. There is general torpor of the system, and extreme sensibility to cold. And again, if the stomach be oppressed by food that it cannot digest, the heat-producing power is weakened, and the patient will experience the same symptoms as from exposure to cold. In the first instance the heat is carried off by cold and dampness, and in the latter the power of producing heat is diminished.

The effects of cold upon the system are exceedingly various: thus, one whose digestion is strong may undergo long exposure to cold, for digestion being carried on vigorously, the lost heat and nervous power is soon supplied, and but little inconvenience is experienced. Whereas one of feeble digestion may become dangerously ill, by a very slight exposure. Thus, some women will remain for hours in a cold spring house, during the hottest weather, and experience no inconvenience, whilst in others it would be followed by dangerous illness, and possibly occasion death.

CHAPTER IV.

DISEASE AFFECTING THE MOUTH AND THROAT.

SECTION I.

CROUP—HIVES.

This dangerous disease is peculiar to childhood, usually occurring between the first and fifth year.

Causes.—Exposure to cold and dampness; having the feet damp many hours together; and the presence of undigested food in the stomach, are the general causes of croup. Some children are peculiarly liable to this form of disease; whilst others will bear almost any degree of exposure without ever having an attack of it.

Symptoms.—The disease sometimes comes on suddenly; the child, for instance, goes to bed as well as usual, and becomes suddenly attacked with it during the night. Generally, however, its approach is gradual, with the usual symptoms that accompany a cold.—Slight oppression of breathing, with a peculiar hoarse and shrill cough; the eyes watery and heavy, and the child dull and fretful. These symptoms frequently continue some days before the disease assumes a violent form. The cough becomes at length more troublesome and shrill, and agitates the child very much; the face becomes swollen and red; the breathing more difficult; the skin dry and hot, with a quick and tense pulse; and as the disease advances, the breathing becomes extremely difficult, accompanied with a hissing noise. Sometimes the cough is quite dry, and in other cases there is a copious secretion from the wind-pipe from the commencement of the disease. If the symptoms are not relieved, and the disease progress in violence, the breathing becomes still more distressing, the child manifesting by its countenance and actions, the greatest degree of suffering; the head is thrown back; the eyes are half closed, and cast about with an imploring expression for relief; the face becomes pale, and covered with large drops of cold sweat; the lips livid; the voice becomes extinct; the extremities grow cold; slight stupor ensues; and finally the heat and sensibility continues to diminish until the breathing ceases.

Spasmodic Croup, (as it is termed,) generally comes on suddenly, and without fever. The cough is not of that peculiar sound that generally characterizes common croup; and in some instances there is an entire absence of cough.

Frequently Fatal.—The great danger attendant on croup, arises from obstructions in the throat or wind-pipe, preventing the free admission of air to the lungs. The obstruction may consist either in the formation of a false membrane in the wind-pipe,—filling up its cavity; swelling and inflammation in the epiglottis; or from spasm in the muscles of the throat. The free admission of air into the lungs being obstructed, the blood loses its vitality in proportion as the supply of air is lessened, and is thus rendered incapable of supporting life. Croup is extremely liable to terminate fatally to the patient, unless checked in its early stage by appropriate treatment.

Treatment.—The means to be relied upon for the cure of croup are, emetics, injections, and the vapour bath.

Emetics.—In the early period, when the symptoms are of a mild character, and the child in good health otherwise, an emetic of the tincture of lobelia may give immediate relief, and remove the disease. If this should not afford relief in a short time, say ten or fifteen minutes, the dose should be repeated at frequent intervals, and injections administered, composed of composition tea, with the addition of a teaspoonful of lobelia powder, and place the feet in warm water. As a substitute for the tincture, infuse a large teaspoonful of brown lobelia in water not quite scalding hot, and give the tea freely. The same may also be administered by injection and retained. The distress sometimes occasioned by the operation of the medicine, can do no harm under any circumstances. The lobelia strikes at the very root of the disease, and though patients may suffer under its influence, it will do more for the patient than any other medicine.

Vapour Bath.—Unless the patient be entirely relieved by the above means, the steam bath should be administered, and during the steaming, bathe the head and face with whiskey, or vinegar and water, and if the patient be faint, dash cold vinegar or water on the breast. It is said that a sudden dash of cold water on the breast, in croup, has been found beneficial by exciting reaction, when the child had become affected with stupor.

Where the symptoms are not so urgent as to require an immediate emetic—for instance, when the child has had a cold for two or three days more or less, which begins to manifest symptoms of

approaching croup, the vapour bath should be administered, previously to the emetic, in order to ensure an effectual operation.

After the bath, a prompt emetic must be given, and frequently repeated until the disease be expelled. The liquid of the third preparation of lobelia, with an equal quantity of brown lobelia, forms the most efficient emetic: to be given in bayberry or sumac tea. For very young children, the brown or green lobelia may be prepared in the above tea, or in composition tea, omitting the third preparation. The lobelia cannot be given too freely to a child in croup, and the more effectually the system becomes relaxed under its influence, the greater certainty there will be of effecting a cure.

When the system is relaxed under the influence of lobelia, the patient is usually thirsty, and if a child be allowed to take the breast freely, it may do harm by oppressing the stomach with food that it is not able to digest. Therefore, it will be safer to give the child small portions of water frequently, or what is still better, composition, ginger, or simple herb teas.

Injections.—These should be frequently administered in bad cases of croup, not only with a view to relieve the bowels, but more especially to excite an afflux of blood to the bowels, and in this way to lessen the determination to the throat. I have on several occasions, observed signal benefit by the administration of an injection of a small teaspoonful of green lobelia powder in lukewarm water, and retained in the bowels ten or fifteen minutes, or even longer. No injury will arise if it should remain for hours. Under the influence of lobelia thus administered, free vomiting will very generally be produced, the system will become relaxed, and the symptoms of croup diminish, and sometimes entirely disappear by this alone.

The treatment should be pursued as long as symptoms of croup continue, or until the case prove hopeless. There are few cases of croup, probably, but might be cured by Thomsonian remedies, if early and perseveringly applied. But after the disease has reached a certain stage—for instance, the windpipe nearly closed by the formation of a false membrane, within its cavity; or effusion has taken place in the substance of the epiglottis, and thus permanently enlarge it, the obstruction in breathing which must necessarily attend either of these conditions, will be almost certainly fatal.

External Applications.—In the first stages of all cases of croup, a portion of cotton, wet with camphor, whisky, or vinegar, may be applied to the throat. A poultice composed of brown lobelia, pulverized, adding a portion of slippery elm, wet with hot water, and applied to the upper part of the throat, is highly recommended

by some practitioners. The poultice must not be allowed to become cold. By having two poultices, and changing them as the one applied becomes cooler, full benefit will be obtained without exposing the throat, except momentarily, to the air. It is important to protect the skin of the throat, after a poultice has been applied; and after the removal of the poultice, the skin may be bathed with No. 6, or stimulating ointment.

Cases of croup are sometimes cured even after the symptoms have assumed a character indicative of a fatal termination. Dr. Chapman mentions a case of croup to which he was called, in which the disease had continued for three days, without the symptoms having been relieved, and as a last resort, they placed the child in a vapour bath, and as soon as the patient began to sweat, the symptoms were relieved. The child was kept in the bath three hours, and recovered. I knew an instance of croup, where a child nine months old, took two ounces of the third preparation of lobelia, in the course of seven hours, and was cured, when a much milder course of treatment would very probably have failed. The free use of the third preparation of lobelia, and the continued application of the vapour bath, together with stimulating injections, will be the most effectual means where the powers of life are far exhausted. The steam bath, by warming the blood, and expanding the tissues, gives the air greater access to the lungs—the vitality of the blood is increased in proportion as the supply of air is greater, and the warmth imparted to the skin attracts the blood to the surface, and tends to equalize its circulation. I have never applied the vapour bath in a case of croup, without relief to the symptoms, though in far gone cases the benefit will not be of long continuance. A child, held on the lap, will bear a moderate steaming for several hours at a time, provided a proper attention be paid to bathing the head and surface of the body, and giving stimulants. The vapour should be of a temperature sufficient to keep the skin warm, and the patient in a moderate perspiration. In violent cases, the lobelia may be given during the application of the bath.

Children are subject to asthma or phthisic, which, in many of its symptoms, resembles croup. But any one acquainted with the croup cough, will be able to distinguish it from asthma. With regard to treatment, however, that which would be most effectual in croup, would be equally appropriate in asthma.

Recapitulation.—In the early stage of croup, attended by fulness of the face and fever, give brown lobelia in infusion with warm water. Giving it by injection, say the fourth of a teaspoonful of the brown lobelia in a little warm water, and retained, will prove very effectual in relaxing the system.

In cases that are more difficult, apply the vapour bath, and give the third preparation of lobelia.

If the tongue be thickly coated, there will be more necessity for the frequent application of the steam bath, and for the free use of the third preparation of lobelia given in strong bayberry tea.

SECTION II.

QUINSY.

This form of disease is characterized by inflammation and swelling of the tonsil glands, which are situated on each side of the throat and behind the root of the tongue.

Sometimes the inflammation is confined to one side, in other instances both tonsils are affected.

Symptoms.—At first there are symptoms of constitutional disorder, as chilliness, loss of appetite and furred tongue, followed by more or less fever. The throat becomes swollen, and swallowing is painful. As the inflammation and swelling increase, the efforts to swallow become more difficult and painful, and in some instances the patient is entirely *unable* to swallow. The voice becomes indistinct or whispering, and in some cases, the breathing is much embarrassed; the pulse is generally full and frequent, and the face red and tumid. There is usually a tough ropy mucus secreted on the inflamed surface, which is expelled with considerable difficulty. The swelling of the tonsils is always observable externally, and the parts are very tender and painful to pressure.

Inflammation of the tonsils is extremely liable to terminate in suppuration. In many instances an abscess will be formed, and discharge in a few days from the commencement of the inflammation. There is chilliness at the time the abscess is forming.

Causes.—Persons predisposed to quinsy are liable to an attack from a sudden check of perspiration, more especially after severe exercise or fatigue. Exposure to cold damp air, and standing on damp ground, are the principal exciting causes of this disease.

Quinsy is rarely attended with much danger, when properly treated from the commencement.

Treatment.—To promote perspiration, and to cleanse the stomach and bowels, are the most important indications for the cure of quinsy. A full course of medicine will be proper in the com-

mencement, as the surest means of moderating the violence and lessening the danger of the disease, and, in some instances, it will put a sudden stop to a farther increase of the inflammation and swelling.

In violent cases, the patient should be kept slightly nauseated by broken doses of lobelia in composition, or such other warm teas as are good to promote perspiration. When there is great difficulty in swallowing, the lobelia may be administered by injections, in small portions of luke-warm water, and retained. Vomiting may be very readily effected in this way, and prove of benefit in any stage of the disease.

A strong tea of bayberry, or sumac, with a portion of cayenne pepper, given occasionally, and more especially when the coating on the tongue begins to soften, is peculiarly serviceable to cleanse the stomach.

The feet should be kept warm, and occasionally placed in warm water.

Gargling the throat frequently with very cold water, or vinegar and water, appears to be particularly serviceable in this affection, at the same time taking freely of the hot medicine to sustain the circulation and promote perspiration. Gargles of pepper sauce, or of bayberry and pepper, may also be employed with a view to excite the secretions and clear the throat of mucus. The tincture of lobelia may be usefully employed as a gargle.

Poultices.—Slippery elm, ginger, and green lobelia, forms a good poultice, to be applied warm to the throat, and to keep the poultice from getting cold, five or six thicknesses of flannel should be applied over it; or in place of a poultice, spread a plaster of stimulating liniment, or salve, on a piece of silk, oil-cloth, or bladder, and apply to the throat; this last application is preferable to a poultice at night, on account of the liability of the poultice becoming dry and cold.

Inhaling the vapour from vinegar may give relief.

When an abscess is formed in the tonsil, and the patient greatly distressed from the swelling, it may be opened with a lancet in order to allow the matter to escape; an operation attended with no danger, and one which gives immediate relief. After the abscess has discharged, a gargle of bayberry or sumac tea should be used, adding a portion of the No. 6, or tincture of myrrh.

Preventives.—Those predisposed to quinsy, should make it a practice to gargle the throat every morning with cold water, and occasionally sponge the body with cold water, immediately on rising in the morning; and keep the feet dry and warm.

SECTION III.

MUMPS.

This is a disease of the parotid glands, which are situate below the ears, and behind the angle of the jaws. It is contagious and often prevails epidemically.

Sometimes the gland on one side only is affected, which does not prevent the disease from occurring subsequently on the other side; but where both glands are affected, there is rarely ever a second attack.

Children and young persons are the most liable to this disease.

Mumps is not a dangerous affection, though from exposure to cold, it is liable to be translated to other glands: in the male, to the testes; and in the female to the mammæ, and the former, particularly, sometimes requires judicious and thorough treatment.

Symptoms.—There is swelling below the ear, extending partly over the cheek and neck, and stiffness of the jaws. The swelling increases and the parts become hard and extremely tender, and in some cases the patient is scarcely able to move the jaws. The swelling usually begins to lessen by the fourth or fifth day. There is more or less fever from the commencement, attended with restlessness, and sometimes slight delirium.

Treatment.—Mild cases seldom require other treatment than keeping the parts warm, and to use some mild stimulant, with a view to promote moderate perspiration, as composition, ginger, or pennyroyal tea.

When the symptoms are more severe, the bowels should be relieved by injections, and the stomach cleansed by an emetic. If the symptoms continue to be distressing, broken doses of lobelia should be given, with warm tea.

The local applications to the swelling, should consist of volatile liniments; sweet oil and spirits of hartshorn; or camphor, opodildock, &c., and the parts kept warm with flannel or cotton. Especial care should be taken to avoid taking cold.

When the disease is translated to the testes, a full course of medicine should be administered, and the patient be kept in a perspiration by being in bed, and drinking of warm teas, and broken doses of lobelia. In severe cases the patient should lie on his back, and have the testes supported by a soft cushion, and frequently bathed with volatile liniments, or apply a soft emollient poultice. The poultice should be wet occasionally with warm

water to prevent it from hardening. Stimulating applications should be made to the parotid glands, as bathing with the third preparation of lobelia, or using warm poultices containing mustard or pepper, and kept warm.

SECTION IV.

COMMON SORE THROAT.

Soreness of the throat, arising from the same causes as quinsy, is distinguished from the latter by the absence of much swelling in the tonsil glands, and no tendency to terminate in abscess.

Sore Throat is a common attendant on colds, and is usually preceded by chilliness and flushes of heat, checked perspiration, and impaired digestion. The throat is dry at first, and there is pain on attempting to swallow; cough, and sometimes an inclination to vomit. There is a discharge of a thick yellowish mucus takes place sooner or later, and the soreness and inflammation subsides.

The treatment should consist of hot medicines to warm the stomach and bowels, and promote perspiration, assisted, if necessary, by the warm foot bath or vapour bath, and the feet kept warm.

An Emetic will be of benefit in severe cases, and small doses of lobelia given to produce slight nausea. This is more particularly indicated when the skin is dry or where there is fever.

The best Gargle for sore throat is capsicum tea, or pepper sauce. When the inflammation subsides, and a thick yellowish mucus is secreted, astringent gargles should be used, such as sumac or bayberry tea.

There is a variety of other remedies useful for colds and sore throat, as flaxseed, or slippery elm tea, with the addition of a portion of lemon juice, and sweetened with rock candy; honey and vinegar; molasses and fresh butter stewed together, with the addition of a portion of red or black pepper, is a good remedy for ordinary sore throat.

Filling a stocking with hops moistened with hot vinegar, and applying it to the throat at night, will generally put a stop to a further increase of the inflammation.

The Constitutional Treatment for sore throat, is precisely such as should be employed in bronchitis, catarrh, quinsy, or any other disorder of the kind. Herein is the excellency of the Thomsonian system: embracing a few general principles, which are applicable to all cases. The human constitution is governed by general laws which are unvarying and unchanging. And although disease may appear in a variety of forms, yet it is always the same in principle, requiring but few general remedies applied to suit the circumstances of the case.

SECTION V.

APHTHOUS SORE MOUTH.

(*Infant's Sore Mouth.*)

In this disease there is a secretion which forms in patches over the tongue and mouth resembling whey curd. In some cases the disease spreads and covers the tongue, and occasionally extends to the stomach and bowels, appearing at the anus,—these parts becoming excoriated.

Local Treatment.—In the first place rub off these white patches with a dry rag; then wet a finger, and cover it with fine bayberry powder, and rub over the tongue and sides of the mouth. Then lay on the tongue some finely powdered chalk, mixed with an equal quantity of loaf sugar. These applications will generally cure in a few times repeating. Rubbing the dry powder over the surface stimulates the mucous glands, and changes the secretions to a more healthy condition.

Constitutional Treatment, in mild cases, is seldom necessary, more than to allow the child to swallow the chalk and sugar laid on the tongue.

In more obstinate cases, give the child two or three times a day, a tablespoonful or more of the strong decoction of bayberry or sumac, with the addition of half a teaspoonful of powdered chalk, and sweetened. And if there be symptoms of the disease having spread throughout the stomach and bowels, besides the above mixture, give three or four times a day, half a teaspoonful of composition powder, in a tablespoonful of bayberry tea; and use injections to regulate the bowels. If this is not sufficient, apply the vapour bath to warm the blood, and give an emetic to cleanse the stomach.

SECTION VI.

ELONGATED UVULA—FALLING OF THE PALATE.

The uvula, a small fleshy body, hanging from the middle of the arch of the palate, over the root of the tongue, is liable to become elongated, from exposure to cold and damp weather, or from an acid or otherwise disordered stomach. Sometimes there is but a slight lengthening of the uvula, and in other instances it becomes greatly elongated, having sometimes the appearance of a bladder of water, and is very troublesome to the patient from the unpleasant sensation occasioned by it in the throat.

From a frequent occurrence of this affection, the uvula is liable to become permanently elongated, and excite frequent coughing, which in some instances does injury to the lungs. Cough of long standing is sometimes cured by the removal of a part of the uvula, where it had become elongated.

Treatment.—Recent cases of this affection may, in general, be readily cured by a few doses of composition, or of bayberry and pepper, and using a gargle of black pepper and whiskey, or a strong decoction of some vegetable astringent, as bayberry, sumac, witch hazle, or marsh rosemary, adding cayenne pepper.

When the uvula becomes permanently lengthened, and excites troublesome coughing, a portion of it should be cut off, provided the above gargles have no effect in exciting it to contraction. The clear No. 6, or the third preparation of lobelia, may be also used as a gargle where the parts have been long affected.

CHAPTER V.

DISEASE AFFECTING THE STOMACH AND BOWELS.

COLIC.

Colic is usually divided by medical writers into at least three varieties, namely, *Accidental or Flatulent Colic*, *Bilious Colic*, *and Colica Pictonum, or Painter's Colic.*

1. *Flatulent Colic.*—This species of colic is produced by a collection of wind or flatus in the stomach or bowels, from indigestion. Persons of weak digestion and acid stomach, are liable to colic from inaccuracies in diet, or from drinking freely of cold liquids, such as lemonade, ice water, or cold milk. Colic generally comes on an hour or two after eating, yet sometimes immediately after. Before the pain seizes the patient, he generally feels a sensation of fulness and distress at the pit of the stomach. In some instances the food passes into the bowels imperfectly digested, and the colic does not come on until several hours after eating, and the pain is chiefly about the umbilicus or navel. When the pain is severe, the patient bends his body forward, and twists about with his hands pressing hard upon the abdomen. The pain is generally lessened whenever there is wind forced upward or downward. Sickness at the stomach almost always accompanies colic, and if free vomiting take place, the distress is greatly mitigated, and sometimes entirely relieved.

Distinguishing Signs.—A disposition to press the hand upon the belly; the bending and twisting of the body; the frequent belching of wind, and absence of fever, serve to distinguish colic from inflammation of the stomach. In *painter's colic*, the abdomen, instead of being distended, is contracted, hard, and rigid, and the pain comes on and increases by slow degrees.

Treatment of Flatulent Colic.—In colic there is a want of power in the stomach or bowels to contract and expel the wind. The chief indication, therefore, for the treatment, is to administer such stimulants, by the stomach or by injections, as will excite contraction, and expel the *flatus*.

Stimulants.—There are a variety of stimulants, either of which may answer in mild cases; such as capsicum or composition tea, Thomson's No. 6, oil of juniper, spirits of turpentine, or essence of peppermint. The teas must be drank as hot as the patient can bear them.

Emetics.—A prompt emetic of lobelia is the most effectual means for curing colic, when the pain is in the stomach. The liquid of the third preparation of lobelia to be given in hot composition or bayberry tea; or the lobelia powder and No. 6, used in place of the third preparation.

The Vapour Bath, not only has a tendency to relieve colic, but it assists the operation of the emetic; the bath, however, will seldom be necessary except in very severe cases, and in case the system be very cold or torpid.

Injections.—When the pain is seated in the bowels, injections may be given, prepared in the usual way. A prompt emetic, however, will generally overcome pain in the bowels. When the stimulating injections are expelled suddenly, without affording relief, the lobelia powder should be administered in warm water, and care should be observed to retain them as long as possible.

External Applications.—Flannels wrung out of hot water, or wet with hot whiskey, or No. 6; or hot bricks, wrapt in damp cloths, should be kept to the stomach and bowels. Heat applied to the feet is also beneficial.

Anti-acids.—In most cases of colic there is acid in the stomach, interfering with the free operation of emetics, which requires to be neutralized by alkalies, such as sal æratus, bi-carbonate of soda, or a tea of hickory ashes. Soot tea answers the same purpose, and will of itself, when drank freely cure mild cases of colic.

When lobelia is not at hand, or cannot be readily obtained, a teaspoonful of mustard in warm water, a tumbler of warm soot water, or warm chamomile or bonesett tea, may be given to produce vomiting.

Infants are peculiarly liable to colic pains, which may be relieved generally by the most simple remedies; as warm tea of catnip, ginger, calamus, or mint. Adding a few drops of the essence of peppermint, or tincture of lobelia, will render the teas more effectual.

Soot tea is very good for cholic in infants; emetics, however, are sometimes necessary, and always safe.

SECTION II.

CHOLERA MORBUS.

This form of disease is occasioned by indigestion from unwholesome food, or from want of vital power in the system. It is common in hot weather, but more particularly in autumn.

Symptoms.—Cholera morbus usually comes on suddenly, commencing with distress and pain at the pit of the stomach and in the bowels, followed by severe vomiting and purging. When the symptoms are violent, the strength is rapidly exhausted, and great distress is felt at the pit of the stomach. The thirst is excessive—and in many instances, the patient is harassed by cramps in the

Tuscles of the abdomen and lower extremities, and the pulse is usually irregular and feeble. The severe and continued retching, and strong efforts to vomit, generally occasion more or less bile to be thrown up, which is observable also in the evacuations from the bowels.

The *aggravated* form of this disease which prevailed a few years since, received the name of *Asiatic cholera.*

Cholera is generally rapid in its course, and, under unfavourable circumstances, frequently terminates *fatally;* as when it occurs in vitiated and broken down constitutions, the patient subjected to an improper course of treatment, such as large doses of narcotics, or calomel; or when the vital powers are prostrated by the loss of blood.

Causes.—There are certain atmospheric influences that evidently predispose the system to cholera morbus. The general exciting causes of the disease are a sudden check to perspiration; unwholesome food, or that which is hard of digestion; intemperance, and drinking copiously of cold water on an empty stomach. In some seasons, almost every person that is sick will have more or less of bowel complaint. Intermitting fever sometimes commences with a violent attack of cholera morbus. During the season that the cholera prevailed throughout this country, almost every person had, more or less, a looseness and disorder of the bowels, showing very plainly that there must have been a cause existing in the air which tended to weaken the vital principle and enfeeble the powers of digestion.

Treatment of Cholera Morbus.—The most important indication in the treatment of cholera morbus, is a thorough emetic and a free use of injections. The vapour bath should be administered, or hot bricks, or bottles of hot water, wrapped in damp cloths, placed around the patient. As long as the symptoms of retching and purging continue, together with pain and cramp, the third preparation of lobelia *must be given in full and frequent doses.* A milder stimulant, for instance, as composition, will in many instances be thrown off the moment it is swallowed, without producing a sufficiently beneficial result. I have witnessed cases in which every thing swallowed had been rejected instantly, with the exception of the third preparation of lobelia, which remained several minutes before it was thrown off, and would bring morbid matter from the stomach, which could not have been thrown off without it. I know of no form of medicine of equal efficacy, in all bad cases, as the third preparation of lobelia in bayberry tea. Patients in many instances have continued retching and vomiting for hours in succession, raising scarcely any thing, yet by taking a vapour bath to warm the blood and restore the nervous power, or excitability of the system, followed by a prompt emetic, large

masses of undigested food have been thrown off, and the stomach become settled in a short time. Therefore it will not do to be satisfied without giving an efficient emetic, as long as the stomach continues its efforts to relieve itself, or the system remains in a collapsed state. Even though the stomach should not contain any thing that requires to be removed, and the retching continues from an unsettled, or, as it is termed, an irritable condition of the stomach, the emetic would be as likely to quiet the stomach as any medicine that could be given.

Dr. George M'Clellan stated in one of his lectures, that in the post mortem examinations that he made where patients died of cholera, he invariably found the stomach more or less filled with masses of undigested food, and in many instances observed substances that must have been swallowed many days previous to their death. The doctor adopted the practice of giving prompt emetics in every case that came under his care, and by this course of treatment he succeeded in raising every patient subjected to this mode of treatment.

Flannels wrung out of hot brandy or No. 6, should be applied over the abdomen.

After the disease is checked, which it almost always is under thorough Thomsonian treatment, the patient must remain quiet, and warm in bed, and take occasionally some spice bitters and pepper tea; or the No. 5 syrup, or cholera syrup, may be taken occasionally.

The digestion being left weak, care will be necessary to regulate the diet, and to avoid all kinds of fruit, pastry, and every thing difficult of digestion. Milk porridge, barley water, custards, &c. will be proper; and, if the patient desire it, he may take moderately of boiled or broiled ham, and also the thin part of a salt mackerel *boiled*, but neither broiled nor fried.

To allay thirst, the mouth and throat may be gargled frequently with cold water, but cold liquids must not be swallowed, except in very small quantities. Capsicum tea, by exciting the secretions, will generally allay thirst.

A mustard plaster over the pit of the stomach will have a tendency to allay the vomiting and relieve the pain; taking care to remove the mustard, however, before it produces a blister.

SECTION III.

CHOLERA INFANTUM—CHOLERA OF INFANTS.

(*Vomiting and Purging of Infants.*)

Infants are especially liable to bowel complaints arising from indigestion, particularly when they are teething. When there is both vomiting and purging, it is called *cholera infantum*. It seldom comes on suddenly violent, as happens in the cholera of adults; generally commencing with diarrhœa, which continues several days, before vomiting take place: occasionally, however, the vomiting and purging comes on simultaneously.

Infantile cholera, like that of adults, arises from a loss of the power of digestion; the food being imperfectly digested, becomes sour and acrid, and offends the stomach and bowels, similar to an irritating cathartic; for instance, mandrake, or jalap—the constitution endeavouring to cast off the undigested matter by vomiting and diarrhœa.

Cholera of infants is usually much more protracted in duration than that of adults; generally continuing for several days, and not unfrequently it becomes chronic. In many instances, however, the vital powers sink rapidly, and the disease, if not subdued, will become suddenly fatal. Where the disease is unchecked, the strength soon becomes greatly exhausted; the flesh wastes rapidly: the countenance becomes shrunken and pale; the extremities cold; the belly swollen and hot; the skin dry and husky, or cool and flaccid; the discharges from the bowels frequent, watery, and acrid; the little patient doses with his eyes half closed, and rolls his head when awake. The eyes become sunken and glassy; the lips blue; the breath cool; and finally the patient sinks into a state of insensibility, and in many instances dies with symptoms of dropsy on the brain. Patients have recovered from this disease, however, even after the occurrence of the above symptoms. A feverish state of the system is always more favourable than an opposite condition. In many instances the evacuations from the bowels consist of a deep green fluid—the green colour probably is owing to the acid in the bowels, acting upon the colouring matter of the bile.

Thomsonian treatment will generally succeed in curing cholera infantum, if timely and properly administered.

Treatment of Cholera Infantum.—The same general course of treatment is required in this form of disease, as in that for adults—

relying chiefly upon the vapour bath, emetics, and injections, in the early stage, together with the use of stimulants to support the vital powers, to determine the blood to the surface, and to promote healthy secretions; astringents to "remove the canker;" anti-acids and absorbents to neutralize acid; and finally tonics to restore digestion.

The Vapour Bath.—Whoever has witnessed the effects of steaming in cholera infantum, must become convinced of its utility. I have, in many instances, seen little patients made comfortable, at least for a time, by the bath, when they before were suffering the most severe spasms of pain. It is a universal opinion among practitioners of the old school, that the liver is in a state of torpor in this disease, and by failing to secrete bile, occasions the stools to be of a light colour.

From the close sympathy existing between the skin and the liver, the vapour bath, by its prompt action upon the skin, tends to restore action in the liver. Besides this, the vapour bath, when well applied, warms the blood, and also thins it, by quickening its circulation through the lungs. Steaming will also increase the natural sensibility of the system, and cause the emetic and other remedies to operate more promptly and effectually. The best mode of steaming infants is to do it on the mother's lap, or if they can sit on a chair this will be better. The steaming may be continued from fifteen minutes to half an hour, and repeated as often as the case may require, washing over the surface occasionally while in the bath, with spirits, vinegar, or simply with water. The shower bath, or dipping the child instantly from the steam into a tub of cold water, may be practised with perfect safety, except in very low cases, when there is not heat or nervous energy sufficient to excite reaction. Exciting reaction in this way, it is in many instances of especial benefit, more particularly in chronic cases. After this, the patient should be clothed warmly, and have a flannel bandage over the abdomen, which may be wet occasionally with No. 6, or the third preparation of lobelia.

There is no form of disease in which I have found the vapour bath more beneficial than in bowel complaints. To keep the head constantly wet with vinegar and water, when steaming, is both grateful and beneficial to the patient.

Emetics may be prepared in various ways. I have generally found the following form to answer as well as any other:

An even teaspoonful of green lobelia,
Ditto of No. 6,
In a small teacup, half full of very strong bayberry or No. 3 tea. The lobelia to be added to the tea when mode-

rately hot. To be strained and sweetened; and to an infant give a tablespoonful every ten or fifteen minutes, until free and full vomiting is produced.

In severe cases I have used the third preparation of lobelia, together with a portion of the green lobelia, adding the bayberry tea. Green lobelia in composition tea does very well in mild cases.

In cases where I have deemed it necessary to continue the use of a diffusive stimulant, and occasionally to relieve the stomach by vomiting, I have given the liquid of the third preparation of lobelia in a small quantity of boiled milk. The best time for giving an emetic is immediately after steaming; still it may be given at any time without the previous use of the bath.

In some cases it may be necessary to repeat an emetic every two or three hours; in other cases once or twice a day; and in others still less frequently: the nature of the case, however, will point out when an emetic is necessary. I have never witnessed any injury to arise from the frequent repetition of prompt and efficient emetics in *cholera infantum;* but, on the contrary, patients are apt to be permitted to suffer, and even to sink, from oppression of the stomach, which might have been relieved by the early administration of emetics, before the powers of the constitution had sunk under the effects of the disease; and the heat and nervous energy become too far exhausted for medicine to have a proper effect. The operation of an emetic has a beneficial influence upon the liver in arousing it from a state of torpor.

Injections.—In the early stage of bowel complaint, an injection repeated three or four times will, in some instances, be sufficient to check the further progress of the disease. They should be prepared in the usual form, of composition tea and green lobelia, or tincture of lobelia; or of a strong decoction of some suitable astringent, such as bayberry, sumac, raspberry leaves, or dewberry root, adding a portion of No. 6 and green lobelia, or a small teaspoonful of the third preparation of lobelia. When the evacuations are green, denoting the presence of acid, or if they be of a frothy acrid character, a portion of sal æratus, or a teaspoonful of the bicarbonate of soda should be added to the injection. When the parts become sore and irritated from repeated evacuations, or the frequent introduction of the syringe pipe, a gum elastic tube, made for the purpose, placed on the pipe of the syringe, will cause much less irritation than the metallic pipe, and by introducing the gum elastic tube four or five inches, the injection will have a more decidedly beneficial effect. In those cases where injections, given with an ordinary syringe, are immediately rejected, the gum elastic tube, or a large catheter must be used for the purpose of throwing

the injection so far into the bowels as to prevent its *immediate* expulsion, without having the desired effect.

In all protracted cases of this complaint, the mucous membrane of the stomach and bowels become coated with thickened secretions, forming a false membrane, and which may often be seen in the ejections from the stomach, and in the evacuations from the bowels. Until this false membrane is removed, digestion cannot be restored; and until the digestive functions are restored, the diarrhœa will continue. The false membrane that forms on the mucous membrane of the stomach and bowels, resembles that which forms on the wind-pipe in some cases of croup. The reason why so many children die of bowel complaints under the old school practice, is doubtless because the medicines employed are not adapted to the removal of the false membrane, coating the stomach and bowels. Small portions of cayenne given in bayberry tea, composition powder, prepared as mentioned in the next paragraph below, bayberry powder, or spice bitters, prepared in the same way, or a strong tea of these articles, are the means to be employed, together with frequently steaming the patient, and giving prompt emetics and injections.

Composition Powder.—As much of the composition powder as will lay on a ten cent piece, rubbed up with an equal quantity of sugar, and then stirred into a tablespoonful of strong bayberry, or sumac tea, and given, repeating it every two or three hours, will in general prove far more beneficial than the composition tea. In slight cases, this dose repeated two or more times a day, will be sufficient to check the disease, at its *commencement*. The composition, prepared in this way, may be given in all cases, and when repeated two or three times a day, or as the case may require, it frequently has proved more effectual in my hands than any preparation of cholera syrup that I have ever used.

Capsicum, though unpleasant to administer to children, is nevertheless one of the most valuable medicines in all cases of disordered bowels. There are few cases, probably, of cholera infantum, that may not be cured by a timely and free use of cayenne pepper. An additional quantity of capsicum added to the composition or spice bitters, will render their use more effectual. A very good way to administer pepper to children, is to add it to a small quantity of boiled milk. It is generally more effectual, however, given in the form of simple tea sweetened. When the tongue is dry and the patient thirsty, the pepper tea should be used instead of the composition and bayberry. I frequently combine pepper with ginger, making a strong tea of them, and give a teaspoonful with the addition of ten or fifteen drops of the tincture of lobelia every half hour.

External Applications.—These may consist of stimulating liniment, No. 6, or the third preparation of lobelia applied to the abdomen; or warm poultices over the region of the bowels, composed of composition powder, slippery elm, and green lobelia, moistened with warm water, enclosed in gauze or book-muslin, and applied to the parts. The poultices must be kept warm, for if they become cold they will be likely to do harm. It is a good plan to have two poultices, and change them when they become too cold or dry. Mustard plasters over the stomach are useful in some cases, more particularly where the stomach remains irritable and the patient continues retching after the operation of an emetic. The mustard must be removed before it draws a blister.

Anti-acids.—A weak tea made by pouring boiling water upon common soot and sweetened, will relieve colic pains, by causing the removal of the flatus from the stomach. The soot tea, or sal æratus, or bi-carbonate of soda, is sometimes necessary to be given to neutralize the acid in the stomach, before an emetic will operate effectually.

Diet.—During the active stage, or until the disease be checked, a most careful attention will be necessary in the selection of food. It is better to give the patient no food, at least for a reasonable length of time, than to introduce such into the stomach as it cannot digest. Bermuda arrow-root, gum arabic, crust coffee, milk porridge, Irish moss, oat-meal gruel, and barley water, form the most suitable articles of diet. It will be proper in severe cases to use some one of the above articles for infants that have not been weaned, for the mother's milk will in some cases be thrown up in solid masses soon after it is swallowed, or passed off by the bowels in an indigested state. The excessive thirst attending the disease will induce an infant to take the breast almost constantly, and take large quantities of milk into the stomach, which sometimes forms into masses of cheese-like substance, and will greatly increase the suffering, and even endanger the life of the patient. Drink, as well as food, should be given in very small quantities. A teaspoonful of gum arabic water, or of barley water, is as much as should be given at once, to infants, in cases where the stomach is very weak; this quantity, however, may be given frequently. By dissolving gum arabic in composition, or spice bitter tea, it will supply both food and medicine. The following constitutes a suitable article of diet in cases of bowel complaints in general, to wit—tie a portion of wheat flour in a bag, put it in a kettle of boiling water, and boil it four or five hours; then scrape off the wet part and grate the flour and make a gruel. To be salted to suit the taste.

As long as food passes through the bowels undigested, such ar-

ticles of diet must be given as are least disposed to sour or ferment, such as calves' foot jelly, gum arabic, and crust coffee, and even these should be used in very small quantities. The thirst may arise from a curative action in the stomach, and if large quantities of liquids be taken, the stomach may thereby become oppressed, and unable to recover its natural action.

A mixture of salt and vinegar is a favourite remedy in some families in all cases of complaints of the bowels. This remedy has in some cases proved of signal benefit. The vinegar should not be diluted, having as much salt as it will dissolve. To an infant a teaspoonful may be given every two or three hours.

As the stomach and bowels become more settled, and the stools present a more favourable appearance, such as small portions of natural fæces, with thick secretions, in appearance like small flakes of a skin-like substance, together with bilious matter, showing that the functions of the liver are being restored, then stronger food may be given, as chicken tea, essence of beef, with crackers or stale bread, and milk porridge. Salt should be added to the food, as this is a most important article in most cases where patients are recovering from sickness. Patients, in recovering from cholera, very often have a craving for salt food, as old bacon, and salt fish, which may be found not only to gratify the patient, but to tone the stomach, and cause an immediate improvement in the symptoms. The thin part of salt mackerel boiled, or a small piece of salt ham boiled, or broiled, may be given, and the use of it continued, provided it be found not to disagree with the stomach or bowels. "I have seen many children recover," says Dr. Rush, "from being gratified in an inclination to eat salted fish, and the different kinds of salt meat. In some instances they evince an appetite for butter, and the richest kinds of gravies from roasted meat, and eat them to the obvious relief of all their symptoms." Patients are subject, however, to morbid cravings for food, which may be found to disagree with the digestive organs, and it will therefore be necessary to exercise proper discretion in granting much indulgence to extraordinary cravings for particular articles of food or drink. A child may crave sweet cakes, as ginger bread and pound cake, and yet they may be decidedly injurious; or there may be a craving for cold water, which if given too freely, might occasion fatal effects. To restore digestion, the No. 5 syrup may be used, or a tea made by steeping poplar and bayberry bark in boiling water, to make a strong tea. The tea to be sweetened with loaf sugar, and given in tablespoonful doses three or four times a day. This preparation will in many instances cure ordinary diarrhœa, both in children and in adults, and is not unpleasant to take. It becomes more effectual by the addition of a portion of No. 6. A strong tea of the poplar bark alone, will answer as a tonic.

When the disease becomes chronic, and medicines have failed of effecting a cure, or if the child be subject to frequent relapses, there is probably no means so likely of success, as a change of air, or the cold shower bath. It frequently happens that taking a child with this disease from the city to the country air, will in a few days restore the appetite, and the patient will begin to gain rapidly in flesh and strength.

The Cold Salt Water Bath.—In most cases of chronic disease of the bowels, where the patient continues feeble and emaciated, much benefit may be derived by dipping the patient every morning in a tub of cold salt water. If the patient be excessively weak, it will be prudent to temper the water at first by adding a portion of hot water. After being dipped, the child should be wrapped in a blanket, and placed in a warm bed, in order to favour reaction; and if the child becomes warm in fifteen minutes or half an hour, it will most certainly be beneficial. I have, in repeated instances, known cures to be effected by the daily use of the cold bath, where medicine had apparently lost all effect.

Lancing the Gums is often of benefit in the early stage of cholera infantum; more particularly when the diarrhœa first commences; but where the disease has prostrated the strength of the little sufferer, and more particularly if the gums be spongy, cutting them will prove useless, for the teeth will not grow under the circumstances just mentioned.

Injections retained.—A strong tea of poplar bark, or of Peruvian bark, administered by injections and retained, and those repeated as often as twice a day, will strengthen the bowels. They may be employed in any stage of this complaint.

Preventives.—Cleanliness; cold baths in the morning; avoiding all unripe fruit, sweet cakes, pastry, &c.; lancing the gums when teething; residence in the country, and a flannel bandage over the abdomen, are good preventives.

Poulticing the Abdomen.—Since the first edition of this work was published, I have observed great benefit to be derived from the use of warm poultices to the abdomen. Take of composition and slippery elm powder, equal parts, adding a portion of lobelia powder, wet the poultice with hot water, and then mix some lard with it to prevent the poultice drying.

SECTION IV.

BILIOUS COLIC.

When colic is accompanied with bilious vomiting, or the skin and whites of the eyes become sallow, it is termed bilious colic. The supposition that an overflow of bile occasions the disease, has given rise to the name bilious colic, when in reality the liver is in most instances in a torpid condition, and secretes less bile than when in a state of health. The digestion being impaired or suspended, the bowels cold and inactive, the bile is not used, and being retained in the duodenum, it is drawn into the stomach by the act of vomiting, and thrown up. A vitiated state of the bile is doubtless a frequent cause of the sickness and vomiting, but this unhealthy condition of the bile is an effect and not the cause of the disease.

Bilious colic is more liable to occur in autumn, and especially in localities where ague and bilious fever prevail.

In most instances the general health is considerably deranged before the attack of colic is manifest. The appetite is impaired; the tongue coated with fur, and the bowels costive, or otherwise disordered. The skin is dry, and frequently there is pain and soreness in the back; an uneasy sensation at the stomach, bad taste in the mouth, headach, nausea, and sometimes vomiting. These symptoms are followed by cutting pains in the stomach and bowels; sickness at the stomach, and vomiting: frequently bile is thrown up. The pain increases, and, in many instances, assumes a very violent character. There is great prostration of strength, and usually some attending fever. The bowels in almost every instance are obstinately constipated, having lost their power of action. As the disease continues, the abdomen becomes sore and tender to pressure, and in most instances the complexion has a yellow tinge. The duration of the disease varies greatly in different cases, and as it occurs under different circumstances: sometimes it is overcome in a few minutes, by proper treatment in the commencement; and in other cases it will continue with more or less severity, at intervals, several days in succession.

Treatment of Bilious Colic.—A full course of medicine timely administered, will overcome the pain, and check the further progress of the disease in a great majority of cases.

Lobelia Emetics are more effectual in general than any other curative means in the treatment of bilious colic. Even where the pain is wholly confined to the bowels, it is generally relieved by free vomiting, together with the relaxation produced by the lobelia. In sudden attacks, where the pain is violent, an emetic of

the third preparation of lobelia, or of lobelia powder and No. 6, must be given without waiting to administer the vapour bath. If, after the full operation of the emetic, the pain still continues, a full course of medicine will be necessary, or the emetics repeated, together with the application of hot fomentations to the abdomen, or the application of hot bricks, wrapped in damp cloths, to that part. In some cases the emetic will require to be frequently repeated. When the patient has warning of the approach of colic, a regular course will be more likely to keep it off than a simple emetic without the bath and enema.

There are many persons subject to periodical attacks of bilious colic. Such persons are generally dyspeptic, and exhibit marks of a torpid liver. I have known several cases of long standing effectually cured by an occasional course of medicine, together with appropriate intermediate treatment, and strict attention to diet.

The bowels being obstinately constipated, will require the aid of injections, more especially if the pain be chiefly in the *lower* bowels. The usual stimulating injections may be used, and they always should contain lobelia. In obstinate cases, I have witnessed great relief afforded by introducing a stomach tube, or large catheter, eight or ten inches into the bowels, and passing an injection through it; the introduction of the tube, however, requires care, and sometimes it is difficult to accomplish it, even by those who have had experience in the operation. Injections of spirits of turpentine is highly recommended by many practitioners. The mode of preparing is to rub together a tablespoonful of turpentine, and the yolks of two eggs, adding a pint of warm water; or mix the turpentine with some dry slippery elm powder, and then add the warm water. I have used injections of the lobelia powder, in warm water, and had the patient to retain them, for the purpose of effecting relaxation of the system, which has generally been attended with decided benefit.

Charcoal.—When the patient has been vomiting a great deal, and the stomach rejects composition, cayenne, &c., mix a teaspoonful of purified charcoal in each dose of the medcine, and give it freely. The retching and straining efforts to vomit, are believed to prove beneficial, oftentimes by exercising an influence over the circulation and secretions of the liver.

The Warm Bath generally affords considerable relief, and may be used to prepare the system for an emetic.

External Applications.—Besides the vapour and warm bath, much benefit may be derived by the application over the abdomen of warm stimulating poultices, hot fomentations or mustard plasters. The mustard must not be allowed to form a blister.

After the disease is subdued, but the nervous system continuing weak and agitated, the valerian, or scull-cap tea may be administered; the latter answers both as a nervine and a tonic. To prevent a relapse, the patient should take a dose of spice bitters occasionally, or some other warm medicine, and pay strict attention to diet.

I do not know of an instance of bilious colic, in which the Thomsonian practice has failed, when perseveringly applied, not only to remove the pain at the time, but in every case a permanent cure has been effected, even where the patients have been subject to frequent attacks of the disease during a period of from two to twenty years. The plan generally to be pursued, is to administer an emetic, or a full course of medicine, when there are symptoms of a disordered stomach, or of an approaching spell of colic.

A Case.—J. M. E. had been subject to attacks of bilious colic, and applied to the Homoepathic practice, after the regular treatment had failed. The Homoepathic medicine gave him almost instant relief from the pain, and he continued to use the medicine whenever the attack of colic came on, until finally the spells became much more frequent, and attended with neuralgic pains throughout the system. He became alarmed, and placed himself under Thomsonian treatment, and by taking a few courses of medicine, at proper intervals, and stimulants intermediately, he was effectually cured. This patient had not more than two returns of the spells, after the first course of medicine was given him.

The above case illustrates the fact, that although a medicine may overcome pain, it may, at the same time, not only fail of *removing* the disease, but may lay the foundation for another form of disease still more troublesome.

SECTION V.

COLICA PICTONUM—PAINTER'S COLIC.

This most distressing malady, which has received a variety of appellations, such as painter's colic, lead colic, and dry bellyach, is caused by exposure to the fumes, but more particularly to the dust, of white lead. Painters, and more especially those who assist in the manufacture of white lead, are liable to this form of disease.

Symptoms.—As the system becomes gradually poisoned by the metallic substance, the general health is correspondingly impaired.

There is an uneasy sensation at the stomach; failing of the appetite; constipation of the bowels; general debility and lassitude; a sense of weight and constriction in the abdomen, with transient pains in the stomach and bowels. By degrees the symptoms become more distressing; the pain in the stomach and bowels increases; the abdomen is hard, and instead of being distended, as in other forms of colic, it is retracted, and the natural action of the bowels is suspended. Vomiting almost always accompanies this disease; and immediately after vomiting, the patient experiences more or less mitigation of the pain. This disease is not only of an agonizing character, but it is apt to be protracted in duration, continuing in many instances for two or three days with but slight mitigation of the suffering. In the more violent cases the pain extends from the bowels up to the chest and into the arms, and downwards to the bladder and rectum, accompanied with a distressing sensation of weight and bearing down, and frequently great difficulty in evacuating the bladder. Cold sweats break out over the face and extremities; and, in some instances, there is delirium, stupor, and convulsions. If the disease be not subdued, the vital powers begin to sink; the abdomen becomes swollen and puffy, yet with an abatement of the pain; the thirst is excessive; the sight is impaired; the feet become swollen; the countenance pale and haggard; there is difficulty of breathing, and finally the patient sinks into a state of stupor, terminating in death.

By a continued exposure to the poisonous influence of lead, the vital powers become so far exhausted, as to be insufficient, even by the aid of medical means to eradicate the poison from the system, and to restore the organs to a healthy condition. Patients that have had two or three attacks of painter's colic seldom recover fully from the effects of the poison. The appetite is bad; digestion greatly impaired; the natural temperature of the body very low; the extremities always cold; the bowels continue obstinately constipated; the spirits sunken and depressed; the complexion sallow and of a leaden hue; the flesh wastes away; the skin is dry, harsh, and contracted; the temper is peevish and sullen, and the countenance is expressive of gloom and suffering. In the first attack of the disease, however, it is almost always curable; though it requires several days in almost every instance to effect a *favourable* crisis in the disease. In most instances a cure may be effected, aided by the recuperative efforts of nature, during the first attack.

Treatment.—Painter's colic requires the same general plan of treatment recommended for the cure of bilious colic.

The Vapour Bath, besides fulfilling other important indications will prove more effectual than any other means used to remove the

poison from the blood. Besides applying the steam, hot poultices or warm fomentations should be applied to the abdomen.

Emetics are as essential in this form of disease as they are in that of bilious colic, or cholera morbus. In many cases free vomiting affords almost the only relief from pain, until the disease be subdued. The third preparation of lobelia answers well for the emetic. The straining efforts to vomit when the system is relaxed by lobelia, though distressing at the time, is doubtless, in many instances, beneficial to the patient.

The Compound Lobelia pills may be given in sufficient quantity to keep the patient constantly under their influence.

Stimulants.—Cayenne, composition, or bayberry tea and cayenne, must be employed as general remedies, unless the compound lobelia pills be used freely.

Injections.—These will be of great service to moderate the pain. They may be administered frequently, especially if they afford relief. Besides the stimulating kind, an occasional injection of two or three teaspoonsful of lobelia powder, mixed in lukewarm water, and retained in the bowels, will tend to overcome the rigidity of the muscles, and alleviate the nervous spasms.

The extreme torpor of the bowels would render the utility of cathartics, to say the least, extremely doubtful; they would have a tendency to harass the stomach, and if not ejected by the stomach, might become absorbed into the blood. The true indication of treatment for getting rid of the poison, is to stimulate the system, and by this means, those organs designed for removing deleterious agents from the system, will have their curative action increased.

In some cases the following form of injection will afford more relief than any other, to wit: put together one tablespoonful of oil of turpentine, a tablespoonful of sweet oil, and the yolks of two raw eggs, beat well together, and add a pint of warm water. The patient should endeavour to retain the injection ten or fifteen minutes.

Astringents are especially beneficial in all cases of painter's colic. A strong decoction of the compound of the bayberry and sumac berries, does better than the tea of the bayberry alone. I succeeded in curing a case of the disease that had become chronic, the patient having been several years employed in Mr. Witherill's white lead manufactory, where he was daily exposed to the deleterious fumes of this noxious mineral. In this case I found as-

tringents peculiarly beneficial, administered three or four times a day, with the addition of a small portion of capsicum.

This patient also used injections of the same, and occasionally had a vapour bath and an emetic. Large quantities of a thick membranous substance were passed from his bowels by the injections.

It must be borne in mind that painter's colic is not to be cured, in general, short of several days, and in some instances not under two or three weeks.

During convalescence the patient should take tonics, and once or twice a day, a teacup half or two-thirds full of a decoction of the bayberry or sumac berries, and avoid exposure to the fumes of lead.

Precautions.—Those engaged in the manufacture of white lead should make use of fat meats, or use freely of palm oil at meals, and never be exposed to the lead in the morning with an empty stomach. A tablespoonful of palm oil taken in the morning is said to afford protection to the stomach against the effects of this mineral poison.

SECTION VI.

DYSENTERY.

This disease is characterized by severely griping pain in the bowels; a frequent inclination to go to stool; and the evacuations consist of blood and mucus. Sometimes the evacuations consist chiefly of mucus;—at other times they are very bloody.

These dysenteric symptoms are generally preceded by lassitude, chilliness, with flushes of heat, loss of appetite, torpid bowels, bad taste in the mouth, and nausea.

From the commencement of dysentery, until there be considerable amendment, the natural fæces of the bowels are retained, or voided in very small quantities, consisting in general of small hard balls, called scybalæ. The passing of these hard balls through the diseased bowels, is attended with severe pain.

Dysentery prevails most during the latter part of summer, and also in autumn.

Causes.—Perspiration suddenly checked by cold, especially where the system is exhausted from over-exertion, is a common cause of dysentery. "A cold and moist autumn succeeding a warm and dry summer, is peculiarly favourable to the production of dysentery.

Dysentery frequently prevails as an epidemic in low marshy districts of country, probably from the combined influence of marsh effluvia and dampness. The same causes that produce dysentery in one person may occasion bilious fever (as it is called) in another; and hence it often happens that both forms of disease prevail at the same time, and some patients will have all the symptoms of dysentery and bilious fever at the same time.

Among the occasional causes of dysentery may be mentioned unripe fruit, and other unwholesome articles of food, taken into the stomach.

Fatality of the Disease.—When dysentery prevails, epidemically, it frequently proves fatal, and particularly so under the old school practice. Except under very unfavourable circumstances, however, the Thomsonian practice, promptly and judiciously applied, seldom fails of bringing the disease to a favourable termination.

Dr. Thomson, in his Narrative, makes mention of a malignant form of dysentery which prevailed in the town of Jericho, in 1807, where out of twenty cases under the treatment of the medical faculty, but two recovered. The inhabitants became alarmed, and sent an express for Dr. Thomson, who began to treat the disease according to his system of practice, and of thirty cases which came under his treatment, all except two recovered. "I had," says the doctor, "but little medicine with me, and had to make use of such as I could procure at this place. I found the cause of the disease to be coldness and canker; the digestive powers being lost, the stomach became clogged, so that it would not hold the heat. I made use of red peppers, steeped in a tea of sumac berries, and sometimes the bark and berries, to raise the heat and clear off the canker, which had the desired effect. After taking this tea, those who were strong enough, I placed over a steam, as long as they could bear it, and then put them in bed. Those who were too weak to stand, I contrived to have set over the steam, and this repeated as occasion required." To restore digestion, the doctor made use of a syrup made of black birch bark and cherry stones bruised.

Treatment of Dysentery.—Dr. Thomson's course of medicine fulfils all the necessary indications for the cure of dysentery.—The *course* should be repeated daily in bad cases.

During the intervals between the courses of medicine, or when the disease is of a mild form, not requiring a course of medicine, any one of the following preparations may be given at intervals of one or two hours, viz:—

A strong decoction of bayberry or sumac, adding a portion of cayenne pepper, and sweetened; composition, cayenne in tea, pills, or in cold water; or the compound lobelia pills taken at the rate of four pills every two hours.

The composition powder rubbed with a little sugar, and then adding sufficient lukewarm water to make it easy to swallow, will prove more effectual than the tea of composition.

When the patient is not very feverish, and the tongue is thickly coated and not very dry, the following preparation will prove highly beneficial, given every hour or two—namely, take two teaspoonsful of No. 6, one teaspoonful of fine bayberry powder, and one teaspoonful of sugar. Mix these well, and if too thick to swallow, add a little warm water.

The Vapour Bath is signally beneficial in dysentery, and may be frequently administered ; and will afford much relief to the patient. After the bath, and the patient is rubbed dry, apply stimulating ointment, the third preparation of lobelia, or No. 6, over the surface. Bottles of hot water or hot bricks, wrapped in damp cloths, should be kept to the feet and abdomen.

As a substitute for the vapour bath, in mild cases, wrap the body, from the hips to the arm-pits, with a bandage of flannel. The constant application of warmth and pressure, is of great importance, and well adapted to all cases of bowel complaints, both acute and chronic.

Injections.—The inflammation that exists in dysentery is the result of the reaction of the constitution to overcome the debility or loss of vitality of the parts. Injections assist the restorative action, and remove acrid secretions. They should be composed of astringents and stimulants. A strong decoction of bayberry, dewberry root, or raspberry leaves, adding a teaspoonful of the liquid of the third preparation of lobelia, to half a pint of the tea; or scald a teaspoonful of pepper with the other articles, add a teaspoonful of lobelia powder, and stir the mixture. Lobelia in some form, either the powder or liquid of the third preparation, should generally be added. A large teaspoonful of lobelia powder infused in half a pint of warm water, or half a pint of composition tea, may be used in place of the more stimulating injections.

When the stools are very offensive, purified charcoal should be added to the injections, and also be given occasionally with the medicine otherwise taken. In the place of the charcoal the chalk mixture may be used; or the bi-carbonate of soda or sal æratus.

Castile soap and water forms a mild, and in many cases, a very efficient injection in cases of dysentery. On making a trial, if it be found to agree with the case by mitigating the violence of the pain, it should be employed.

The chief objection to frequent injections, is the irritation produced by the metallic pipe of the syringe. It should be well covered with tallow ; or a gum elastic tube made for the purpose, placed on the metallic pipe.

Professor Chapman, in a lecture on dysentery, in 1840, stated, that at Vera Cruz, the only successful treatment in the malignant dysentery that prevailed there, consisted of giving the patients freely of cayenne pepper tea, and using injections of the same.

A case of dysentery occurred in Chester county, of the most severe character, in which a quarter of a pound of cayenne pepper was used by injection and given in tea during one night, together with a large quantity of the hot drops, and bayberry tea. The patient speedily recovered, and no doubt by means of this energetic treatment.

Poulticing the Abdomen.—Warm poultices composed of slippery elm and composition ; or of Indian musk, with a portion of cayenne added, applied to the abdomen warm, will always prove beneficial, and sometimes it will entirely remove the griping pains.

Diet.—This must be of the lightest kind of food, such as barley water, arrow-root gruel, weak chicken tea, sago, rice, slippery elm, Iceland moss, the bene plant, &c. When the patient becomes convalescent, stronger food may be given, as boiled chicken and wild game, custards, eggs, and almost any kind of wholesome diet.

To assist in restoring digestion, the spice bitters and other tonics may be employed.

Favourable Symptoms.—"The appearance of bile, and natural fæces in the stools, indicate a favourable change." When the pain, and inclination to stool, "and tenderness of the abdomen abate, at the same time that the skin is uniformly moist, we may regard the case as approaching a state of canvalescence ; and more certainly if the stools assume a more natural appearance."

SECTION VII.

DIARRHŒA—RELAX.

This complaint is a consequence of indigestion. It prevails most during hot weather, and presents in different cases, great diversity of character, being in some instances an obstinate and painful disease, and in others a slight affection. Children are extremely liable to this form of disorder throughout the hot summer months, and also in the damp and changeable weather of autumn.

Diarrhœa is a milder form of disease than cholera morbus or cholera infantum.

General Causes.—Diarrhœa may be produced by any cause which weakens the power of digestion. The usual causes are, continued spells of damp, murky weather; wearing damp clothes; a sudden check to perspiration, when the system is exhausted by fatigue; unwholesome articles of food, especially sour fruit; and drinking too freely of cold liquids, as ice water or lemonade.

Symptoms.—At first there is usually loss of appetite, general debility, coldness of the feet, and bad taste in the mouth. The patient experiences unpleasant sensations at the pit of the stomach: there is generally a rumbling through the bowels, followed by copious evacuations, consisting of thin offensive secretions, and imperfectly digested food, and frequently attended with pain. The skin is either cool and clammy, or dry. When the disease comes on suddenly, and is attended with vomiting, it is called cholera morbus. The colour of the stools, in many instances, is light, indicating a want of bile: in other instances they are partly composed of vitiated bile.

Diarrhœa, *Dysentery*, and *Cholera Morbus*, may arise from the same cause, or combination of causes.

Distinguishing Signs between Diarrhœa and Dysentery.—In *diarrhœa*, the bowels are in a relaxed condition, with copious evacuations, consisting chiefly of imperfectly digested food, and generally free from blood or mucus. In *dysentery* the bowels are costive, the natural fæces retained, and the stools consist principally of blood and mucus, small in quantity, and the disease is attended with severe griping, and a frequent inclination to go to stool.

Treatment of Diarrhœa.—In slight cases, a few doses of composition or bayberry tea, with the addition of No. 6, will, in general, check the disorder, and correct the digestion. A variety of other remedies may be used for this complaint, such as cholera syrup, Thomson's No. 5 syrup, lavender brandy, burnt brandy and loaf sugar, chalk mixture, lime-water, and purified charcoal. Salt and vinegar has been employed with remarkable success, in many families, in the treatment of bowel complaints that prevail in hot weather.

When the symptoms are more distressing, or the case proves obstinate, the most effective means will be a *full course of medicine*, succeeded by the use of the hot medicine, and the patient kept comfortably warm and quiet.

Warm stimulating poultices applied to the abdomen are particularly serviceable in diarrhœa and in bowel complaint in general.

In the commencement, in many instances, but more especially when the disorder has been checked, bitters should be used to restore digestion.

Flannel Bandage.—Persons subject to frequent attacks of diarrhœa, may derive great benefit by wearing a flannel bandage covering the whole of the abdomen. This will keep the skin regularly warm, and prevent a sudden check to perspiration from the vicissitudes of the weather. This simple plan of bandaging the belly, will generally prevent the summer complaint in children, even during their second summer, provided they be bathed daily, and a proper attention be paid to their diet.

When the disease becomes protracted, and the symptoms distressing, a prompt course of treatment should be pursued until the disease be removed. The vapour baths and emetics should be repeated as the nature of the case may require. In cases of children I have frequently witnessed more benefit derived by one vapour bath and an emetic, than would have been accomplished probably in two or three days under a mild course of treatment. When medicine has to be forced upon children, it is certainly best to give such as will be the most effectual to break up the disorder. Let the No. 3, or bayberry powder be made into a strong decoction, and to a teacup half full of this tea, add an even teaspoonful of composition powder. This given two or three times a day, will be an effectual remedy in most cases of simple diarrhœa. The No. 3 pills may be used in place of the above decoction.

Injections of the above tea, adding a portion of No. 6 and green lobelia, or a teaspoonful of the third preparation of lobelia, will be found especially beneficial to strengthen the bowels.

Diet.—Especial attention to diet is necessary in all cases of bowel complaints. In general, milk porridge, well prepared, will agree with the stomach, and in some cases will check the disorder, by confining the diet to it alone, or with the addition of stale bread cut thin and toasted thoroughly, or soda or water crackers. Fruit of every description is apt to disagree with the bowels in diarrhœa, unless it be fresh picked, and eaten with some solid food.

Boiled rice and milk, Bermuda arrow root, elm gruel, sago, tapioca, fresh eggs slightly cooked, essence of beef, boiled chicken, crust coffee, and Irish moss, are such articles as are generally adapted to cases of diarrhœa. Rice scorched, ground, and made into coffee is a favourite remedy with some for this complaint.

I have known cases of chronic diarrhœa cured by a free use of capsicum at meals.

SECTION VIII.

PERITONITIS.

(*Inflammation of the Peritoneum.*)

Disease of the peritoneum (the membrane lining the cavity of the abdomen, and which also forms the external coating of the bowels) is not of very frequent occurrence: when it does take place, however, it is in many instances extremely difficult to cure, unless a vigorous and persevering course of treatment be instituted in the first onset of the disease.

Causes.—Long exposure of the body to cold after fatiguing exercise, is the usual cause of peritonitis. It may arise, also, from other causes, as taking too freely of ice water; mechanical injuries of the bowels; the escape of fæces into the cavity of the belly from wounds of the intestines, or by ulceration through the coats of the bowels; wet and cold feet; and, in females, from bad management during, or after confinement. In two fatal cases that came under my notice, one was brought on by washing the body in cold water, the patient remaining undressed until the body became completely chilled: the other case was produced by standing some hours in cold water, up to the middle, in a well.

Symptoms.—The first symptoms are such as usually occur in the commencement of other forms of disease, such as chilliness, lassitude, pain in the limbs, and distress at the pit of the stomach. In some instances an acute pain is felt in some part of the belly, from the commencement. In other instances, and even those of the most rapidly fatal character, there is scarcely any pain felt during any period of the disease.

The Symptoms which characterize this Disease, are extreme tenderness to pressure over the surface of the abdomen, the patient assuming a bent posture in order to relax the muscles of the belly; a contraction of the upper lip and peculiar expression of countenance; the patient generally lies on his back with the knees drawn up, and avoids moving his body; and the pain is of an acute and lancinating character, generally confined at first to a small space, and spread-

ing gradually, and sometimes shifting suddenly from one spot on the belly to another.

In most instances there is at the commencement of this disease, and al[illegible]ter stage, if the disease terminate fatally, more [illegible]ountenance is pale, and expressive of ex- [illegible]. "Generally, in the course of from twen- [illegible]the abdomen becomes swollen, tense, and [illegible]tion of the intestines, and extremely ten- [illegible]ed and laborious in the latter period of [illegible]ally, being short, difficult, and attend- [illegible]in the countenance. The pulse is [illegible]and in all cases quicker than natu- [illegible]most invariably more or less dimi- [illegible]most wholly suppressed. When [illegible]is the seat of inflammation, the [illegible]ormly be suspended, and much [illegible]eal covering of the inferior sur- [illegible]v the principal or sole part of [illegible]in this case almost constant

[illegible]lammation terminates by the [illegible]ably or fatally. In some cases [illegible].e patient sinking by the second [illegible]nent. Occasionally, however, the [illegible]teenth or fourteenth day.

[illegible]his disease is extremely liable to terminate [illegible]. "When this occurs, the abdominal pain suddenly subsides; the pulse becomes very small, frequent, and often intermitting; great muscular prostration ensues; the extremities become cold and clammy; and the countenance pale, hollow and contracted;" there is a sort of gulping up of liquids swallowed, and usually there is more or less delirium.

When peritoneal inflammation ensues after confinement (constituting puerperal fever) the lochial discharge ceases, and the secretion of milk is suspended, or nearly so. Under such circumstances the disease is mostly rapid in its course.

Treatment.—There is probably no form of disease requiring more vigorous treatment than *peritonitis*. The first and most important remedy is a vapour bath, which should be continued for hours together; or blankets wrung out of hot water be kept constantly applied to the abdomen; the patient being on a cot or mattress, if too weak to sit up; and at the same time frequent and full doses of the third preparation of lobelia should be given, together with lobelia injections, composed simply of lobelia powder in lukewarm water, and retained, if possible; and as often as every hour or two, an

additional injection, consisting of a tablespoonful of the liquid of the third preparation of lobelia in bayberry tea. In place of the vapour bath, blankets wrung out of hot water, may be applied to the abdomen, or a large poultice composed of elm powder, green lobelia and ginger, applied all over the belly, as hot as can be borne, and to be kept warm by bottles of hot water or hot bricks placed close to it, or it may be taken off and warmed when necessary.

It is important to relax the system in the early stage of the disease, by giving; besides the third preparation of lobelia, frequent doses of an infusion of the brown lobelia. The more the system becomes relaxed by the lobelia in the early period of the disease, the greater will be the chance for the inflammation to establish a favourable crisis.

When a favourable crisis takes place, and the system sinks into a state of extreme exhaustion, as is frequently the case, more especially when the disease occurs in the puerperal state, diffusive stimulants should be employed, as wine whey, carbonate of ammonia, the third preparation of lobelia, capsicum tea, &c.

"There is a period in some cases of abdominal inflammation when the disease is nearly subdued, yet a tendency to gangrene exists from deficiency of vital power. At such a time the pain will vanish, the pulse become weak, the vital powers sink, and a coldness overspread the body. These symptoms are too often indicative of mortification; but every experienced practitioner must have occasionally witnessed cases of recovery even from this alarming state." Therefore the free use of stimulants under these circumstances, may have the effect to turn the scale in favour of recovery and even if mortification should have taken place stimulants can do no injury.

Many women have died within the last few years of peritoneal inflammation after confinement. One physician in Southwark lost fourteen women in the course of a few months. No case of death from this complaint has happened under the Thomsonian treatment in Philadelphia. Dr. Samuel M'Clellan Professor of Midwifery in the Pennsylvania College, in a lecture to his class, in the winter of 1843, stated, that the treatment he had found most successful, was to apply blankets wrung out of hot water to the abdomen, use emollient injections very frequently, and give simple rhubarb tea. This course of treatment though much more rational and safe than that generally pursued by the profession, would doubtless prove far less effectual, than through Thomsonian treatment, such as the employment of the vapour bath, prompt emetics and injections, containing lobelia. Fomentations to the abdomen or hot poultices should be employed in all cases.

SECTION IX.

CONSTIPATION—COSTIVENESS.

Costiveness, in general, is a consequence of diminished peristaltic action of the bowels, from diminished nervous power. The habitual use of purgative medicines destroys the natural tone of the bowels, and thus proves one of the most common causes of constipation. A patient becomes uncomfortable in consequence of the sluggish state of the bowels, and a dose of physic is taken. In a few days, however, the same bad feelings return with loss of appetite, furred tongue, and bad taste in the mouth; there is heaviness and languor, and oppression at the stomach. The patient supposes he is bilious, requiring another dose of physic to purge off the accumulation of bile, and in this way continues to use some kind of cathartic at frequent intervals, harassing the stomach and destroying the natural action of the bowels. Costiveness is sometimes *constitutional*, and in general it arises from causes which depress the nervous energy, such as sedentary habits, foul air, intemperance, and all kinds of deleterious medicines, whether mineral or vegetable. The practice of giving anodynes to infants weakens the tone of their bowels, and in numerous instances the foundation of habitual costiveness is thus laid. It is very common in the old practice for a physician to recommend laudanum, or some other preparation of opium, for children and infants when sick, and on the following day prescribe a dose of oil to move the bowels, which had become torpid in consequence of the anodyne; the physic disturbs the stomach and impairs digestion; and the little patient consequently becomes fretful; another dose of anodyne is administered, which benumbs the sensibility of the nervous system, and the child sleeps, but the medicine instead of removing the disease, rather increases the difficulty; costiveness continues, and another cathartic is prescribed, and thus one medicine is given to counteract the bad effects of the other. Not only is such a course generally pursued in the treatment of infants and children, but a similar one is resorted to by many physicians in the majority of cases of sickness in adults that are placed under their care. It is very rare to find a person affected with obstinate constipation of the bowels who has never been in the practice of taking cathartics.

There are persons constitutionally costive, whose bowels are not moved oftener than once a week, and yet the general health remain good. Such instances, however, are very rare, for most persons feel more or less uncomfortable without an evacuation as often as once in twenty-four or forty-eight hours.

The use of purgative medicines although they may relieve distress of the head, pain and other uncomfortable feelings arising from constipation, still they will impair the digestive and nutritive functions, leaving the bowels in a worse condition than before the cathartic was taken. To provoke the bowels to action by the use of cathartics is one thing; to promote the natural action of the bowels is quite a different matter. I will not presume to say that there are no cases of constipation in which small portions of rhubarb or bitter root may be serviceable, under particular circumstances. The true nerves of sensibility, by which the bowels are stimulated to expel their contents, are seated in the lower portion of the rectum, and no where else, and no matter how irritating a substance may be it will not move the bowels until some portion of it reaches these nerves of true sensibility situated at the lower extremity of the intestine.

Means to remove Costiveness.—There are a great diversity of remedies and means to restore the action of the bowels.

A proper Diet.—Certain articles of food will in a great many instances keep the bowels regular, such as stale bread, or gruel made of ground wheat unbolted, Indian bread, ripe fruit, rye mush, oat-meal gruel, and calves' foot jelly. No certain plan of diet can be proposed that will suit every one. Bread made of unbolted wheat flour will probably agree with almost every one, and its efficiency has been so well attested as not to admit a doubt of its utility. I have known *obstinate* cases of *constipation* overcome by the free use of a gruel made of the unbolted flour, together with the use of cayenne pepper, and the entire absence of every kind of cathartic. In the use of the unbolted bread or gruel, other kinds of food need not be excluded. Animal food is necessary to the health of some, and should be used when it agrees with the stomach. Beef, mutton, and all kinds of wild game are as readily digested as vegetables.

Charcoal.—Finely pulverized charcoal, taken in large teaspoonful doses, repeated three or four times a day, is a valuable remedy for costiveness, especially when constipation is accompanied by a sour stomach or heartburn. Costiveness arising from pregnancy, may in most instances be removed by the free use of charcoal. In the latter stage of pregnancy, however, it is sometimes necessary to resort to the use of stimulating enemas, in order to evacuate the bowels. The charcoal should be first moistened and rubbed into a paste, and it will then mix readily with liquids. I generally direct it to be taken in composition or spice bitters tea. It may be taken, also in simple warm water, or in boiled milk. The dose is from a teaspoonful to a tablespoonful, repeated three or four times a day before meals.

White Mustard Seed is a favourite remedy used by many to stimulate the bowels, and overcome costiveness. The usual dose of the mustard seed is a tablespoonful once or twice a day, taken in warm water or molasses.

Capsicum.—This is one of the purest and best of stimulants, and is especially beneficial in most cases of torpid bowels. Taken freely at meals, it will not only assist the action of the bowels, but will be sufficient, if used freely, to cure many cases of dyspepsia. There are many kinds of food that will set well on the stomach, if highly seasoned with cayenne, which without it would occasion oppression, and distress the stomach. Those who do not relish food highly seasoned with pepper, may take the cayenne immediately after eating, in a little cold water, or as some prefer, swallow the whole pods of the bird-pepper. These pods are not thicker than a small goose quill, and scarcely ever an inch in length, so that half a dozen may be swallowed at a time, and no burning produced in the mouth. Ten or fifteen of these pods taken daily will be sufficient, in general, to keep the bowels regular. The use of cayenne in cases where there is a superabundance of acid in the stomach and bowels will sometimes occasion pain in the bowels, and other unpleasant sensations; and occasionally active purging comes on; the cayenne increasing the sensibility of the bowels and the acids operate as a cathartic. As soon as the acids are expelled the patient may increase the quantity of pepper taken to twice or three times the quantity before taken, without any cathartic effect being produced by it.

Parched Corn eaten freely, is a good regulator of the bowels, and relieves heartburn. The corn should be well parched and then it may be taken freely in any case. The best kind is the little "chicken corn," or as some call it "pop corn."

Astringents.—When the tongue is thickly furred, and not dry or parched, the astringents recommended by Thomson will be useful by cleansing the cankered bowels and increasing their tone. The best astringent is the bayberry, or a compound of bayberry and sumac. The No. 3 pills may be used in place of a decoction of the above powder. Injections assist very much in cleansing the bowels of morbid secretions, and also have a tendency to increase their tone.

Bitters.—Vegetable bitters are particularly indicated when the system is relaxed, as in recovery from sickness when the bowels remain torpid. A teaspoonful of bayberry powder taken two or three times a day will be sufficient to keep the bowels regular, in those cases where tonics are indicated. The golden seal, balmony,

or black aspen poplar may be employed for the same purpose. In continuing the use of tonics it is proper to change one for another, or to compound them differently every few days.

Injections should be used occasionally until, by other means, the natural action of the bowels be restored. When constipation is attended with piles, an injection of a strong decoction of the witch hazle, at bed-time, retained in the bowels until morning, will in general procure a passage from the bowels, and also assist in curing the piles.

Cleanliness, exercise in the open air, the warm bath, the shower bath, the daily use of the flesh brush or salted towel over the surface, and whatever else will invigorate the nervous system, will have a salutary effect upon digestion, and assist the peristaltic action of the bowels.

The habit of soliciting a stool at a certain hour daily, more especially in the evening, though it may fail at first, yet if persevered in, it will generally prove successful.

Three or four of the compound lobelia pills, taken at bed time, have proved successful in many cases, in regulating the bowels, and in promoting the secretion of bile.

SECTION X.

DYSPEPSIA—INDIGESTION.

Digestion is accomplished by a series of actions extremely complicated, liable to derangement from various causes. Hence dyspepsia is a common complaint, and prevails in all classes of society. Probably more than half of the cases of dyspesia in the country, are caused by dampness.

Causes.—Dyspepsia in many instances is a consequent of original feebleness in the constitution. Apart from this, the following are among the common causes of indigestion.

1. *Exposure to Cold and Dampness—especially Damp Feet.*—This is a common cause of dyspepsia in the country during damp seasons of the year.

2. *Tobacco.*—The inordinate use of this article is a fruitful source of dyspepsia. It causes imbecility of mind, and in some instances, melancholy.

3. *Purgative Medicines.*—The long continued use of cathartics impair the functions of the stomach and bowels, and in frequent instances, where there is but slight derangement in the stomach at first, "the drugs are poured down," and the case becomes one of confirmed dyspepsia.

4. *Anodynes.*—All the various preparations of opium, such as laudanum, Godfrey's cordial, &c., enervate the stomach, and weaken the power of digestion. Hence Dyspepsia often takes place in childhood by the prevailing practice of giving anodynes during infancy.

5. *Sedentary Habits.*—Persons engaged in sedentary pursuits—seamstresses, shopkeepers, shoemakers and tailors, are liable to dyspepsia, especially when confined to small and ill-ventilated apartments.

6. *Unwholesome Food.*—Many who by a proper diet might enjoy good health, are tormented with indigestion, in consequence of the use of food difficult to digest, such as hot bread, fresh pork, hot cakes, sausages, pies, &c. Hearty suppers, especially of such food as sausages, hot cakes, and strong coffee, cause restless and disturbed sleep, frightful dreams, and nightmare.

7. *Blood-letting.*—Many cases of dyspepsia may be traced to the profuse depletion frequently practised by physicians in pleurisy, and in the various forms of acute disease attended with high fever. The system becoming exhausted from loss of blood, the organs are left in a languid condition, incapable of performing their functions properly, and in many instances occasion confirmed dyspepsia.

8. *Poisonous Medicine.*—Professor Chapman asserts that the majority of cases of chronic affections of the liver prevalent in the Southern states, is owing to the inordinate use of mercury, it being a practice among the physicians to administer it in enormous doses. Digestion never can be properly performed whilst the liver is diseased, and therefore, all such cases are more or less dyspeptic. Calomel is often converted into corrosive sublimate, by combining with certain acids in the stomach. A late writer in the medical profession, asserts that calomel is always inert until portions of it are converted into corrosive sublimate, and that the system must become poisoned with corrosive sublimate in order to effect salivation. Arsenic is often employed as a medicine, both by the old school and the homœopathic physicians. It may change the symptoms of disease, but it cannot be employed even in homœopathic doses, without danger of laying the foundation of a dyspepsia, much more difficult to cure than the complaints for which it may

be prescribed. The same may be said with regard to many other articles employed as medicine, particularly *veratria*, strichnine, and prussic acid.

9. *Intemperance* is a fruitful cause of dyspepsia. The practice of taking a morning dram, which prevails in some districts of country is usually followed sooner or later by indigestion.

10. *Abstinence* may be practised too rigidly to be compatible with health, and it may even produce dyspepsia. The exclusive use of a vegetable diet, together with cold water at breakfast and supper, in the place of something warm, is calculated to enervate the stomach.

There are cases in which an exclusively vegetable diet suits the stomach, but with the great majority of mankind, animal food, such as beef, mutton, or wild game, will be found more easy of digestion than a vegetable diet.

11. *Bad Teeth.*—Irritation of the gums arising from teeth that are either decayed or affected with tartar, is a frequent cause of dyspepsia.

A lady from Natchez consulted Professor Chapman for dyspepsia of long standing, and the doctor perceiving the bad condition of her teeth, suspected this to be the cause of the dyspepsia; the decayed stumps were removed, the mouth put in good condition, and the dyspepsia was soon cured. Subsequently this lady had a new set of teeth put in, but which being badly done, the dyspepsia returned with great violence. The teeth were removed, and by being properly adjusted, so as not to irritate the gums, she was soon restored to perfect health.

12. *Piles* often produce dyspepsia, and in many instances the dyspepsia may be cured by their removal.

13. *Moral Impressions.*—From the close sympathy existing between the brain and stomach, moral impressions have a controlling influence over digestion. If a person, soon after eating a hearty meal, hear bad news, digestion will at once be weakened, if not suspended. Close application to study soon after meals, by concentrating the nervous energies in the brain, weakens the power of the stomach to perform digestion.

In fine any cause that weakens the nervous energy, impairs the digestive functions: hence *venereal excesses* are a common cause of dyspepsia.

Symptoms of Dyspepsia.—A low temperature of the body, especially cold hands and feet; oppression, tenderness, and distress at

the pit of the stomach; torpid bowels; heart-burn; frequent belching; sour eructations; offensive breath; and often some degree of fever or excitement after meals. In some instances the appetite is irregular, or depraved, craving green fruit; sometimes the appetite is entirely gone; the spirits are variable, and frequently depressed.

In the more aggravated form of dyspepsia, the mind is liable to become much depressed, approaching in some instances to extreme melancholy, with harassing belchings; water brash: stools clay-coloured, indicating the absence of bile; the skin is dry and husky, yet sometimes cool and clammy; there is wasting of the flesh and ulceration of the tongue and mouth. Pain in the head, palpitation of the heart, dizziness and temporary blindness, and violent pains in the shoulder and side, are symptoms frequently attending dyspepsia.

Sometimes in dyspepsia the sensibility of the stomach is so obscured that the derangement of the digestive organs is scarcely perceived by the patient, the principal symptoms being developed in parts remote from the stomach, where sensibility is more acute. Such is the degree of insensibility in the stomach, that it may become diseased and give rise to almost every variety of disorder without any particular symptoms of derangement being manifest in its own peculiar region. Dyspeptics are extremely liable to pain in the left breast, occasioned by wind in the stomach, and sometimes the pain will be in a nerve remote from the stomach, as in the shoulder, side, breast, or head.

Disorders produced by Dyspepsia.—Dyspepsia long continued, not unfrequently brings on consumption, especially when there is constitutional weakness of the lungs.

Many, if not most of the cases of bronchitis, are a secondary effect of dyspepsia. Clergymen are very liable to disease of the throat, occasioned more by mental labour soon after meals, than by their public speaking.

The liver possessing a close sympathy with the stomach becomes torpid and inactive in many instances, in consequence of the cold and weak condition of the latter. More especially does this occur in the intemperate.

Bilious colic and sick headach are brought on in consequence of bad digestion.

Eruptions of the skin, such as shingles, hives, tetter, and scald-head are occasioned in almost every instance by a disordered condition of the digestive functions.

Asthma, chronic catarrh, worms, piles, gout, diabetes, jaundice, hysteria, neuralgia, dropsy, and in many instances insanity, are brought on by imperfect digestion, or loss of power in the stomach.

Treatment of Dyspepsia.—Dr. Thomson's *course of medicine*,

administered at proper intervals, as the symptoms indicate, together with proper intermediate remedies, will effect a cure in a great majority of cases. If the continuance of the disease depend upon *bad habits*, a cure cannot reasonably be looked for whilst they are continued.

If close confinement in unhealthy apartments be the cause of dyspepsia, exercise and fresh air will be as essential as medicine.

When dyspepsia arises from a bad condition of the teeth, they should be attended to by the dentist, and by one who is properly acquainted with his profession.

In most cases of dyspepsia it is necessary to keep the feet not only protected from wet, but there should be cork or gum elastic in the soles of the shoes, except in the summer season. It is of little use for the dyspeptic to take medicine if the feet are not properly protected from dampness. It would appear from observation, that to go into water even up to the knees, is far less injurious to many than merely walking on damp ground with thin soled shoes.

Emetics.—An emetic of lobelia, prepared in the usual form, will sometimes relieve the stomach sufficiently without the necessity of a full course of medicine.

To promote a healthy action of the skin, an occasional vapour bath, or warm bath, and the daily use of the flesh brush or salted towel, will be the most effectual means.

Capsicum.—The free use of cayenne pepper at meals, will be sufficient to cure dyspepsia in many instances. It is useful to prevent heart-burn and water-brash, and has a tendency to regulate the bowels.

Pills made of equal portions of cayenne, brown lobelia, and powdered gum Arabic are well adapted to almost every case of dyspepsia, and sufficient in many cases if their use be persevered in, to cure many cases of dyspepsia.

Composition Powder.—Dyspepsia of a mild character may be cured by taking a dose of composition two or three times a day. When the patient is exposed to the weather it is best not to prepare the composition in boiling water, but first moisten the powder, and then add half a teacup of *lukewarm* water, stir it well, and swallow it before it settles.

The Spice Bitters may be taken in the same way and for the same purpose.

The Conserve of Hollyhock is a mild stimulant and tonic, and useful in cases of feeble digestion. It is a convenient medicine for persons travelling.

Charcoal.—Purified charcoal being an absorbent and anti-septic, and operating as a mechanical stimulant to the bowels, may be used with advantage in cases of sour stomach, attended with costiveness. The dose is a large teaspoonful to be rubbed up with about an equal quantity of sugar and water, and then add a teacup two-thirds full of a tea of composition or spice bitters; to be taken on an empty stomach, and repeated two or three times a day.

Parched corn eaten freely will often be found effectual in removing costiveness.

Tonics.—In dyspepsia accompanied with a pale tongue, relaxed skin, and general debility, the stronger tonics must be used, such as Dr. Thomson's No. 4 bitters, quassia, wormwood, &c., either prepared in decoction or in tincture.

When there are symptoms of dyspepsia with extreme insensibility of the stomach, benefit may be derived from mechanical means, as riding on a rough trotting horse, or in a rough carriage after dinner, or punching or kneeding the stomach as discovered and introduced by a Mr. Halstead of New York, who was cured of dyspepsia, attended by extreme insensibility of the stomach, by making a false step, by which his stomach received a severe jar.

Alkalies.—Where there is a large amount of offensive gas ejected, either upwards or downwards, the use of lime water will be beneficial.

In cases of simple acidity of the stomach, the super-carbonate of soda, or sal æratus, will neutralize the acid. Prepared chalk may be used for the same purpose, and in some instances will have a better effect than soda or sal æratus.

The following was a favourite remedy with the late Dr. Physic of this city.

> Take a quart of hickory ashes, and a teacupful of common soot, pour on them a gallon of boiling water. The dose a wineglassful after meals.

A decoction of wormwood and hickory ashes fulfils the purpose both of a tonic and anti-acid.

In some cases of dyspepsia, acids will be found to be more beneficial than alkalies, even though there should be acid in the stomach. A mixture of vinegar, salt, and pepper, will be of benefit in many cases. From ten to thirty drops of the elixir of vitriol, in a wineglassful of water, or of bitter tea, three or four times a day, will be grateful to the stomach, and assist digestion.

A tablespoonful of dry wheat bran, two or three almonds, or a teacupful of boiled milk, will relieve the heart-burn.

Colic.—Dyspeptics are liable to colicky pains, from an accumulation of gas in the stomach, which may generally be relieved by Thomson's No. 6, or the volatile tincture of guiacum, given in hot water, composition or pepper tea, and swallowed as hot as the patient can bear. The oil of amber, spirits of turpentine, or oil of juniper may be used for the same purpose. Ten drops of the oil of amber, rubbed up with sugar, and mixed with a small quantity of slippery elm mucilage, will sometimes remove the severest forms of colic, especially when the stomach is very weak. When the case is very severe, the vapour bath, followed by an emetic of the third preparation of lobelia, will be the surest means of relief.

Pain in the Bowels.—This may generally be removed by injections. A stomach tube, or large gum elastic catheter, introduced eight or ten inches into the bowels, and the injection passed through it, will give relief in cases where the injections given in the usual way have little or no effect. Great benefit may be derived from hot fomentations, or a warm poultice applied to the abdomen.

Costiveness.—A torpid condition of the bowels, exists in most cases of dyspepsia, and in many instances it is difficult to overcome, where purgatives have been freely used. Bran bread, or bread made of unbolted wheat flour, is an excellent remedy for costiveness. Cayenne pepper, or pepper sauce, used freely at meals, or immediately after eating, will assist digestion, stimulate the bowels, and frequently be sufficient to overcome the constipation. Clean wheat bran, charcoal, and white mustard seed, act as mechanical stimulants to the bowels, and may be used with advantage. Injections should be used to evacuate the bowels when necessary, until by a proper course of treatment, and a well-regulated diet and regimen, their natural action become restored. Avoid aggravating the bowels by the use of cathartics, as it will be difficult for the bowels ever to recover their natural tone and action, as long as the patient continues to take every week, or every few days, a dose of cathartic medicine.

Diet in Dyspepsia.—No system of diet can be laid down, suited to every case of dyspepsia.

Milk generally agrees with dyspeptics. Milk porridge; boiled milk and rice; Indian mush, well boiled, allowed to become cold, and eaten with boiled milk; and boiled milk and toast, are suitable articles of diet in most cases of dyspepsia. More especially

is a milk diet proper for the morning and evening meal. Milk, when taken cold and in large quantities, sometimes forms an indigestible mass, of a cheese-like substance, occasioning great oppression at the stomach.

As a substitute for milk when it disagrees with the patient, cocoa or chocolate, black tea, or, what is better, the anti-dyspeptic cocoa, prepared by A. Comfort, of Philadelphia, may be used. In some cases of dyspepsia, coffee, well prepared, may be taken, not only with impunity, but with advantage. Much of the evil arising from the use of coffee, is owing to the bad quality of the article, and to the careless manner in which it is frequently roasted and prepared. There are cases of dyspepsia, however, where even the best of coffee is injurious.

Of animal food, all kinds of wild game, when in season, eggs, chicken, turkey, fresh beef and mutton, are the most digestible. Salt pork agrees with many. Fresh pork disagrees with the dyspeptic in almost every instance, yet, notwithstanding, some cases have been cured by eating broiled fresh pork; such cases, however, are very rare. In some, animal food of every description will disagree with the stomach. All kinds of soups are objectionable, from their liability to sour in the stomach; though, in small quantities, they may not disagree with it. There is not the same objection to essence of beef, as to soups.

Bread made of unbolted wheat flour has become a favourite article of diet for dyspeptics, and answers well in the majority of cases. Toasted bread agrees well with many. It should be cut in thin slices and toasted through, so as not to have it doughy in the middle. Bread should not be eaten until at least twelve hours old. Hot cakes should be avoided. Cakes, however, made of Indian mush which has been previously well boiled, will agree with many. Regularity in meals is important. No food should be taken between meals. If a person of feeble digestion eat a piece of gingerbread or pie, an hour before dinner, the appetite will be weakened, and then if the patient eat the usual meal, the food will oppress the stomach.

Besides the remedies already enumerated for the treatment of dyspepsia, there is yet one equally beneficial and suited to almost every case, viz: a strong decoction of the powdered bayberry, with the addition of a portion of cayenne pepper, and sweetened. This will remove morbid secretions, which in most instances coat the stomach and bowels in dyspepsia, and which must be removed before digestion can be restored. Occasionally this dose produces pain, and sometimes vomiting, from which the patient experiences benefit. There is no cause for apprehension of any injurious effects from the pain and distress which this dose occasionally produces: it arises from wind or gas in the stomach, which may be relieved by taking No. 6, in very hot water, or by taking hot water

alone; or essence of pepper mint: or it may be relieved by hot applications to the abdomen. The above preparation is more especially applicable when the tongue is coated. The No. 3 pills may be taken as a substitute for the bayberry tea and pepper.

Change of Air.—A change of residence from the city to the country, or from the country to the city, or removing to a different neighbourhood, will, in many instances, restore digestion, when other means have failed. I have observed the most remarkable change effected in dyspeptics by a few weeks' residence in a pine country, or on the sea-board. The benefit which dyspeptics receive from visiting mineral springs, arises, probably, in the majority of cases, from the change of air, cheerful society, absence from care, and probably from the interruption of *bad habits*.

Cleanliness in person and in dress, promotes digestion, and exhilerates the mind. An occasional vapour bath, followed by a shower bath, is one of the best means for promoting a healthy action in the skin. When the patient is languid and nervous, a shower bath every morning will prove a powerful tonic to the nervous system, and in some instances will *cure* dyspepsia. The daily use of the flesh brush or salted towel will also invigorate the system, cheer the spirits, and promote digestion.

SECTION XI.

WORMS IN THE STOMACH AND BOWELS.

In treating of worms, Dr. Thomson makes the following observations. "A great deal is said about worms causing sickness, and there is scarcely a disease that children are afflicted with, but which is attributed to worms. The doctors talk about worm complaints, worm fevers, worm colics, &c., and give medicine to destroy the worms: by so doing they frequently destroy their patients."

The views of Dr. Thomson concerning the cause of worms, to wit: that they are produced by a disordered state of the stomach and bowels, are doubtless correct.

Different Species of Worms.—There are

1st. *The Long Thread Worm*, which varies from an inch and a half, to two inches in length. About two-thirds of its length is almost as thin as a horse hair, the remaining and posterior part

being considerably thicker, terminating in a rounded or blunt extremity.

2d. *The Maw or Thread Worm.*—"This is a very small white worm—the male being not above two lines in length, with rounded or blunt extremity anteriorly, tapering to a point posteriorly. The female is considerably larger, being from four to five lines in length, terminating in an extremely fine extremity posteriorly, resembling the point of the finest needle. These worms are found only in the large intestines, and principally in the lower part of the rectum, where they are often collected in almost countless numbers," occasioning a most annoying sensation of burning and tickling in the rectum.

3d. *The Large Round Worms.*—These are a species of worms varying in length from three to ten or twelve inches, and about the size of a common sized goose quill. These worms inhabit the small intestines, and occasionally ascend into the stomach. "The *symptoms* indicating their presence are equivocal, but are commonly considered to be, starting in the sleep, itching of the nose, irregular, or excessive appetite, emaciation &c. Nevertheless, these worms are often suspected of being present where they do not exist."

4th. *The Tape Worm.*—The tape worm sometimes acquires a great length,—thirty to forty feet, and even longer. "It is about half an inch in breadth, flat, white, and composed of a series of joints, resembling in shape, a gourd seed. It inhabits the upper portion of the bowels and stomach.

The symptoms usually accompanying the presence of worms in the stomach or bowels are—paleness of the countenance, with occasional flushes on the cheeks; picking the nose; variable appetite, sometimes voracious—at other times entirely gone; offensive breath; copious secretion of saliva; and the tongue furred. The belly is swollen, and there are transient pains through the bowels, and starting in the sleep. These symptoms, however, may all exist, independently of the presence of worms and even when there are worms, most of the attending symptoms may arise from a disordered condition of the stomach and bowels.

"The reason," says Dr. Thomson, "why children are more troubled with what are called worm complaints, is because they are more subject to be disordered in their stomach and bowels than grown persons. When children are sick, and their breath smells bad, it is said they have worms, and every thing is laid to them; but this is owing to disease caused by canker, for there is nothing in the nature of worms that can affect the breath. In cases of this

kind, the only thing necessary is to cleanse the stomach by getting rid of the cold phlegm, and restoring the digestive powers, when there will be no difficulty with the worms."

The practice of giving poison to kill worms in the stomach and bowels, as Dr. Thomson says, "is like the story related by Dr. Franklin, of a man who was troubled with a weasel in his barn, and to get rid of the weasel he set fire to the barn and burnt it up." "I had the following relation," says Dr. Thomson, "from the doctor who attended the cases;—three children had what he called a worm fever; and he undertook to kill the worms. One of the children died, and the doctor requested liberty to open it, to find out what would destroy worms, in order to know how to cure the others; but the parents would not consent. A second died, and the parents consented to have it opened; but after searching the stomach and bowels, to their surprise, no worms could be found. The third soon after died. The fact was, their death was caused by canker on the stomach and bowels, and the medicine given increased the difficulty by drawing the determining powers inward, which aided the cold to promote the canker."

Treatment.—The difficulty of ascertaining whether a child that is sick has worms, should occasion no embarrassment with regard to the treatment to be pursued. The stomach and bowels being disordered, the indications for the treatment will be the same whether the patient be affected with worms or not.

"I have had," says Dr. Thomson, "a great deal of experience in what are called worm complaints; and after having become fully acquainted with the real cause, had no difficulty in curing all that I have undertaken." * * * * * "My practice," says he, "has been what I recommend to others to do in cases that are called worm complaints; to give the composition powder, or No. 2, to warm the stomach, a tea of No. 3, to remove the canker, and the bitters, or either of the articles described under No. 4, to correct the bile. If they are bad, carry them through a course of the medicine, and give the bitters. When there are nervous symptoms, give the nerve powder. Injections should also be frequently given. The butternut syrup is very good. If there should be danger of mortification, make use of No. 6, both in the medicine given and in the injections."

The composition I have found to be most effectual when the powder is given in lukewarm water, or in a strong decoction of bayberry or sumac. This mixture given two or three times a day, together with small doses of the tincture of lobelia, repeated every two or three hours, will, in many instances, remove all symptoms supposed to be occasioned by worms.

The compound lobelia pills given immediately after meals, will be found beneficial in such complaints, and they may be used as a substitute for the composition and tincture of lobelia.

A mixture of vinegar and salt given three or four times a day, is of especial benefit in correcting a disordered stomach, especially when the patient craves acids.

Milk boiled with a portion of tansy may be used to restore digestion; and sometimes it will cause the expulsion of worms from the bowels.

Lime Water.—When the stools are green, or of an acrid character, or if the patient be affected with sour breath, and acid eructations, lime water should be given to correct the secretions. The usual way of administering lime water is to add about an equal quantity of boiled milk. To be taken two or three times a day.

Charcoal.—When the bowels are constipated, a teaspoonful of purified charcoal may be taken two or three times a day in boiled milk. This will overcome costiveness, and it is highly beneficial in the cure of what are called worm complaints.

Emetics, or a Course of Medicine should be given occasionally, as long as there is fever, or the tongue continues furred, and composition powder, capsicum, or spice bitters, to be administered twice or three times daily. When the fever has disappeared and the tongue is moist and cleaning, bitters may be given. When the patient continues in delicate health, after the above treatment, a cold shower bath in the morning, or a change of air, will be found particularly useful. A change of medicine occasionally will be proper in long standing cases; thus a certain kind of bitter may be given for a few days in succession and then change it for another; salt and vinegar may agree with the stomach for a time, and then require to be laid aside for some other remedy.

Worm Seed, or Jerusalem Oak, (Chenapodium Anthelmenticum) is much used for expelling worms. Of the efficacy of this article I cannot speak from observation, never having used it. *The Volatile Oil* of the worm seed, is generally used; the dose for a child is from four to ten drops mixed with sugar, and given in the morning on an empty stomach, and in the evening at bed-time, which may be continued several days in succession.

Treatment for the removal of the Maw or Thread Worm.—This species of worm being located in the rectum, is usually termed *seat worm.* These may be removed by the daily administration of injections, composed of a strong decoction of bayberry or sumac, adding a teaspoonful of No. 6. After the worms are expelled the injections should be administered every few days, to prevent their return. If the general health be deranged, constitutional treat-

ment will be required. Such as the daily use of stimulants and bitters, and occasionally an emetic, or a full course of medicine.

These small worms are contained in a tough mucous, lining the bowels, and being imbedded in it will frequently resist the most powerful cathartics, but administering stimulating injections to excite the secretions and render them less dense and tenacious, and followed by the use of injections of a strong decoction of bayberry or sumac, adding a portion of No. 6, will seldom or never fail of expelling the worms when their use is persevered in. In obstinate cases of seat worms, an injection of a simple decoction of the bayberry or sumac should be administered at bed-time, and retained in the bowels through the night, and in the morning administer another, containing a portion of the No. 6, or the third preparation of lobelia.

Treatment for Expelling Tape Worms.—Every species of intestinal worms, is supported by the cold mucous or "canker," lining the bowels. Dr. Thomson's general plan of treatment, namely: first to give stimulating medicine to warm the stomach and bowels; then use the No. 3 to remove the "canker," and bitters to restore digestion, is adapted to all cases of worm complaints. This is a plan of treatment adapted to all cases of disease of the stomach and bowels, whether worms be present or not.

No small amount of injury has been done by experiments that have been practiced by physicians upon patients supposed to be affected with tape worm. A great variety of remedies and modes of treatment are recommended by different medical writers; one claiming to have been successful in expelling tape worms by a certain method of treatment; whilst another declares that a different and even opposite course of treatment has proved more successful in expelling the worms. Dr. Eberle gives no less than seven different plans of treatment recommended by men who have been considered eminent in the profession. Most of the remedies employed by the medical profession for the expulsion of tape worms; such as tin filings, and irritating cathartics, frequently cause the formation of a false membrane on the mucus surface of the bowels, which will sometimes pass off in the form of a white skin, in pieces varying from half an inch to a foot, or even two or three feet in length, and this substance no doubt has frequently been mistaken for tape worm. Some writers speak of having cured many hundred cases of tape worms, but probably in forty-nine cases out of every fifty, the supposed tape worm was nothing more than the white skinny substance above alluded to.

SECTION XII.

PILES.

This is a disease of the veins of the rectum, which prevails to a great extent in both sexes, and in all classes of society.

Piles commence by an enlargement of the *veins* in the rectum, forming tumours filled with dark blood, which become extremely painful on going to stool, and frequently they discharge a considerable quantity of blood; they are then called *bleeding* piles. When blood is not discharged they are termed blind piles. Sometimes the tumours emerge from the anus, forming *external* piles; when confined within the rectum they are denominated *internal* piles.

1st. *External piles.*—These are at first formed within the rectum, by the blood collecting and forming into clots in the enlarged veins, and are afterwards forced down by the passage of hardened fœces, and by straining efforts to evacuate the bowels, attended with extreme pain, which in some instances continues many hours. Piles are soft at first, but generally become harder in the course of a few days.

In severe cases of piles where the disease has continued some years, a portion of the intestine is in many cases forced down every time the fœces are passed from the bowels, and requires to be presed up by the hand. In some instances the patient will be unable to return the protruded intestine, in consequence of the inflammation and extreme tenderness of the parts. Under these circumstances the patient is compelled to remain in a recumbent position, being unable to walk or even to sit upright. The extreme pain which sometimes continues for many hours after the bowels have been moved, is caused by the piles being pushed down, and when the sphincter muscle of the rectum contracts, it grasps them firmly, and thus operating as a ligature upon them, occasions intense pain.

2d. *Excrescences* in the form of whitish fleshy bodies are apt to be formed around the verge of the anus, in consequence of frequently repeated inflammation of the diseased veins, by which their sides, as it were, are glued together, and adhesive matter is thrown out, which becomes organized, and a hard vascular swelling is produced. These excrescences are apt to occasion irritation and chafing of the parts, and although containing numerous blood vessels, they may be cut away with a pair of sharp scissors, without the least hazard to the patient.

3d. *Internal Piles* may exist far in the rectum, without occasioning pain, or much inconvenience, the discharge of blood being the first symptom of their existence. By the frequent passing of hardened fœces, a relaxed condition of the bowels, or by the use of purgative medicine, the intestine is gradually drawn downward, and finally is protruded beyond the anus every time the bowels are moved, forming *prolapsus ani*. Under these circumstances there is generally much constitutional derangement and more or less fever.

Piles on their first appearance seldom continue for a long interval; they disappear and sometimes do not return, but more generally they return at intervals, until finally the parts become permanently diseased, proving a continued source of annoyance and frequently causing severe pain.

When a number of piles exist low down in the rectum, the passage of hard fœces is rendered extremely difficult and painful in consequence of the cavity of the intestine being nearly closed by these tumours being formed into a body near the orifice of the rectum.

"Among the most common consequences of piles is a kind of tenesmus, with a protrusion of the inner tunic of the rectum, so as to form a prominent and extremely sensitive ring around the anus —particularly after each attempt to expel the fœces."

Piles are very liable to burst, followed by a discharge of blood, on which the tumours disappear, and the distressing symptoms abate until other piles are formed, which also burst and their contents are discharged; and in this way some patients will be subjected to frequent discharges of blood, which may become so profuse as finally to weaken and impair the general health.

Causes of Piles.—The free use of purgative medicines may be regarded as the most common cause of piles. They may, however, be produced by any cause that weakens digestion, or occasions an obstruction to the free circulation of blood through the veins of the rectum; such as venereal excesses, the intemperate use of ardent spirits, sedentary habits, long continued diarrhœa, dysentery, tight lacing, gravel in the bladder, lifting heavy weights, pregnancy, difficult labours, obstinate costiveness, obstructions in the liver, and disease of the lungs.

Treatment.—In the early period of the formation of piles, the use of injections of some active astringent, as a strong decoction of bayberry bark, dewberry root, sumac, or witch hazle leaves, will relieve the symptoms, and may check a further developement of this annoying complaint.

When violent pain attends the piles, relief may be obtained by the patient sitting over steam, or by the application of a warm

poultice, composed of slippery elm and lobelia moistened with warm water; the pulp of a rotten apple; or a poultice of elder flowers. Besides these applications, the patient should drink freely of composition; or bayberry tea, with the addition of a portion of capsicum. This will, in some degree, counteract an undue determination of blood to the rectum. An emetic will commonly relieve the pain when the above means fail, unless the disease be of long standing. Although the pain may be increased during the efforts to vomit, yet the circulation of the blood will soon become more equalized through the system, and the pain thereby mitigated. The pain occasioned by the piles being grasped by the contraction of the sphincter muscle of the rectum after an evacuation from the bowels, is always relieved by pushing the tumour above the sphincter. This may be done by introducing a tallow candle a few inches up the intestine. Sitting over hot water; or applying cloths wrung out of hot water will afford much relief.

During the past two years I have attended many patients affected with piles, and some of them were cases of long standing, and have invariably succeeded either in curing them, or in affording signal relief to the patient by the use of injections, prepared by steeping in boiling water a compound of aspen poplar bark, bayberry powder, and witch hazle leaves. The decoction should be strained, administered lukewarm, at bed-time, and retained until morning. Patients will find no difficulty in retaining this injection, as it contains no stimulant to excite the peristaltic action of the bowels. An injection retained through the night will commonly cause an easy movement of the bowels in the morning, even in the most stubborn cases of constipation. The injection must be repeated every night until a cure is effected. Besides the above treatment, I have usually prescribed the compound lobelia pills, a course of medicine when the system is much disordered, together with bitters to restore digestion.

Dr. Thomson, in his Guide to Health, mentions the case of an "elderly man, in South Reading, who had been confined to his bed for seven weeks with the piles, and several doctors had attended him before he was sent for, and he had continued to grow worse. The doctors had operated on one side, and said they must on the other; it was their opinion, as well as his, that he was in a decline. The side they had operated upon was much worse to cure than the other. I carried him (he observes) through a regular course of the medicine twice in three days, when he was able to go out of doors. The injections were composed of No. 3, steeped, and a small quantity of No. 2 was used; warm tallow was applied several times a day; and occasionally the parts were washed with the above tea. He had been dieted very low; I restored his digestive powers, his appetite returned, the sores healed,

and his general health amended to such a degree, that he was no more confined with that complaint."

Injections prepared and use as directed in a former paragraph, retained through the night, have in some instances entirely checked the discharge of blood from piles, where the bleeding had previously returned at frequent intervals for a period of several years, the wan appearance of the patients showing how much they suffered from the excessive loss of blood. I have always found it necessary in such cases, to give stimulants and bitters, and sometimes a course of medicine.

External piles that remain soft may be lessened, and sometimes dispersed, by washing frequently with a tincture of bayberry, or by applying some ointments containing astringent properties;—for instance, witch hazle, or sumac leaves, or rhattany root stewed in tallow or mutton suet, adding a small portion of beeswax to render it more adhesive. If external piles should continue until they become hard, they may be punctured by the point of a lancet, and the clot of blood must be squeezed out, and the parts washed with tincture of bayberry, and then ointment or tallow applied. It is easy to distinguish between piles, and those fleshy excresences which sometimes form about the margin of the anus; piles have a dark livid appearance, whilst fleshy excrescences have a light colour, and feel spongy.

Vinegar and water is recommended by some practitioners as a wash for external piles.

Essence of peppermint.—Dr. Mattson says he has seldom known this remedy fail of relieving pain from external piles. He recommends taking a piece of cotton, wet it with essence of peppermint, and apply to the part by means of a T bandage.

Ward's Paste.—This preparation has acquired some reputation as an internal remedy for piles. The following is the mode of preparing it:—

Take eight ounces of black pepper,
do. do. elecampane root, powdered,
Sixteen ounces fennel seed,
One pound of honey,
And one pound of sugar.

Mix these in a mortar to form a paste. Dose, a piece as large as a nutmeg, twice a day.

Excrescences.—These are small bodies of a fleshy appearance, sometimes varying from half an inch to an inch and a half in

length, and being well supplied with blood vessels and nerves, they sometimes become a source of great annoyance.

"The mode in which these excrescences are produced is as follows:—The inflammation of the piles glues the sides of the veins together; adhesive matter is thrown out, which becomes organized, and a hard swelling, in which there is a number of vessels, is produced. The excrescences project from the surface a little way up the anus, which is chafed and rendered extremely irritable from this cause. These excrescences are easily removed by a pair of sharp scissors, or by applying a ligature very tightly, so as to obstruct the circulation: the latter method is much more painful than excision.

When a portion of the intestine protrudes every time the bowels are moved, the injections previously spoken of will prove the most effectual means of curing the disorder.

Diet.—This is of the first importance in severe cases of piles attended with obstinate constipation of the bowels. When the passage through the bowels is greatly obstructed by piles, and the parts are highly sensitive and painful, the diet must consist of such articles of food as are most likely to prevent costiveness, such as gruel made of unbolted wheat flour, or bread made of the same material, rye mush and molasses, or cream, Indian mush and cream, stewed prunes, in small quantities, eaten with stale bread or biscuit. Ripe fruits, calves' foot jelly, &c.

CHAPTER VI.

SECTION I.

RHEUMATISM.

The origin of this form of disease may be traced to constitutional disorder, and loss of vital power.

Cold and dampness are the exciting causes of rheumatism in almost every instance. Where, however, there is a strong predisposition to the disease existing, inaccuracies in diet, over-exertion, loss of rest, or any other depressing influence may occasion the disease. I never knew a case of rheumatism that was not preceded or accompanied by a greater or less degree of derangement

of the digestive functions. Patients, however, will sometimes insist that nothing is wrong about the stomach or bowels. The low degree of sensibility in the stomach and bowels induces patients to consider that no derangement exists in these organs, when at the same time, their functions may be so far depressed and deranged, as to give rise to the most painful affections in other parts of the system, as gout, rheumatism, headach, neuralgia, erysipelas, &c.

Parts Affected.—Rheumatism generally attacks the larger joints: the hip, shoulder, elbow, or knee, and frequently the small joints become affected, more especially those of the fingers. Although in general confined to joints, rheumatism sometimes attacks the muscles only, those of the back, neck, and shoulders are most liable to be affected in this way. When in the back it is called lumbago. The membrane covering the eyeball is liable to rheumatic inflammation. The head, heart, brain and womb are also liable to this form of disease.

Varieties.—When rheumatism attacks the young and athletic, the disease is usually accompanied with inflammation of the diseased parts, attended with swelling, extreme tenderness, and frequently a redness of the skin, and generally there is more or less fever, especially at night. Such a case would be termed *acute* or *inflammatory* rheumatism. When the disease occurs in the aged and infirm, and especially in those of broken down constitutions, the powers of nature are too feeble to establish an efficient curative action ; the affected parts will remain pale, and seldom much swollen ; the disease will be fixed in certain joints and not shifting about ; there will be absence of fever and thirst, and the affected joints much less tender than in the former variety. This is called *chronic* rheumatism. The symptoms, however, in different cases, present great diversity of character, from the most acute and inflammatory to that of the lowest grade of chronic rheumatism ; so that in some instances it will be difficult to decide whether to call the disease acute or chronic.

Mercury sometimes occasions disease of the joints resembling rheumatism, and it also affects the membrane that covers the bone, and is most apt to be seated on the long and flat bones—the tibia or shin bone, the arm bones, shoulder blade, skull, &c. Sometimes it commences with a protuberance rising on the bone, without inflammation or pain, and either remaining stationary, or gradually disappearing under proper treatment, or, as is more commonly the case, the part becomes extremely painful, and is frequently followed by suppuration. This mercurial disease is not always confined to the covering of the bone, but occasionally the substance of the bone itself is diseased, occasioning its decay, attended with a discharge of acrid and offensive matter.

Symptoms of the Acute or Inflammatory Variety of Rheumatism.—The disease generally approaches in a gradual manner, with a sense of coldness or numbness in the limbs, loss of appetite, weakness and langour. These symptoms continue for several days, or even weeks, in some instances, before reaction takes place, and the parts become either swollen, painful, or inflamed. In other instances the attack is sudden, commencing with a chill. Pain, tenderness, with more or less swelling and redness of the joints, characterize inflammatory rheumatism. "The patient generally lies on his back, and avoids every motion of the body or limbs; or if he does move, he experiences a sudden aggravation of pain; he cries out, and muscular motion is promptly checked. There is little langour or debility, and but little disturbance of the mental faculties." The tongue is thickly coated, and there is usually perspiration on the face, and frequently on the whole body, which is acid, and exhales a peculiar odour. The urine is high-coloured, scanty, and deposits a sediment, especially as the disease declines. The pain and distress is more aggravated at night, frequently attended with fever, and sometimes slight delirium: or as it is usually expressed, the patent is "light headed." In some instances all the limbs are affected at the onset, the patient being almost helpless. In other cases the disease is confined first to the lower extremities, and then sooner or later it extends to the shoulders, neck, elbows, and hands. If the patient fall to sleep he is apt to be awakened by a sudden jerk or contraction of the muscles, causing severe pain.

The functions of the *liver* are in many instances conspicuously disordered in rheumatism, attended with sallowness of the skin, and whites of the eyes, and occasional sickness and vomiting of bile. After a spell of vomiting, the patient experiences temporary abatement of the rheumatic pains. Although bile be thrown off by vomiting, it does not prove that there is an unusual quantity formed; digestion being suspended or greatly impaired, the usual quantity of bile is not used in the process of digestion.

Not dangerous.—Rheumatism rarely proves fatal, except when seated in the brain, or translated to the heart, or other important *internal organ.*

Duration of the Disease.—The length of time required for the cure of rheumatism, varies in different cases, from a few days to several weeks, and even months. Inflammatory rheumatism is universally admittted to be more easily cured than chronic. Inflammation is a curative process by which nature overcomes disease, and when the inflammatory action subsides without affecting a crisis, or the vital powers are prostrated by blood-letting, purging, or the use of nitre, antimony, &c., the disease is fixed in

the system, and receives the name of chronic rheumatism. "Some practitioners," says Dr. Willan, "continue to let blood in most cases of acute rheumatism, thinking themselves justified in their mode of practice by the sizy appearance of the blood. The same principle might lead them to empty the whole sanguiferous system; for every time blood-letting is repeated, the blood becomes more dense or sizy. I have further observed that, by bleeding repeatedly, the pains, swellings, and febrile symptoms, were not only aggravated at the time, but often protracted infinitely; at least, I have seen them continue, under such a mode of practice, upwards of two months."

Treatment of Rheumatism.—It is admitted even by the opponents of Thomsonism, that the practice is adapted to the cure of rheumatism. Experience has fully tested the insufficiency of the *regular practice* in the cure of rheumatism; and that in many instances, where this practice has failed, the disease has been cured by the aid of *warm weather* alone.

Courses of Medicine constitute the most effectual means for the cure of rheumatism. This to be repeated daily, or less frequently, as the circumstances of the case may demand. The more fully the system is relaxed by lobelia, the more effectual will be the treatment.

A Course of Medicine, early administered, before the disease becomes seated, will in some instances effect a crisis, provided the patient be kept warm in bed, and use be made of stimulants to continue perspiration. Upon the degree of integrity of the general health retained, depends in a great measure the rapidity of the cure. Thus, if the digestive powers be greatly prostrated, or if there be chronic disease of the liver, the treatment will require to be continued for weeks, in many instances, before the rheumatism can be cured. The parts affected in rheumatism possess a low degree of vitality, and when they become diseased, so as to occasion inflammation, it is usually very slow in its progress to a favourable termination.

When, however, the disease has become seated, and the patient cannot be moved without great pain, and more especially during the early period of the disease, emetics may be given without the bath; for in some instances it is better for the patient to be kept at rest, with a moderate and regular heat around him, than to have the inflamed parts aggravated by getting out of bed, and by frequently changing the clothing. When the skin is dry and hot, external *dry* heat may cause the patient more distress, and an increase of pain.

During the interval between courses of medicine, the patient

should take freely of stimulants and broken doses of lobelia. The compound lobelia pills are well adapted to the cure of rheumatism; from two to five may be taken every hour or two as the case may require. To promote perspiration, the patient should take of composition, pepper, or simple herb teas. In many cases the compound lobelia pills, used freely, will supply the place of all other medicine. No other compound appears to be so well adapted to the cure of acute or inflammatory rheumatism as the compound lobelia pills. From 3 to 5 may be taken every hour. Keeping the system constantly under the influence of these pills always relieves the rheumatic pains.

The Vapour Bath.—There is a period in rheumatism, or a certain condition of the system, when the vapour bath will prove most signally beneficial. As a general rule it is the most effectual, either before the disease becomes firmly seated, or whilst it is forming a crisis, or after it has reached its height, and also on its decline. In most cases, however, it is beneficial in all stages of the disease, provided the patient can be moved without great pain.

The steam bath is as much called for in rheumatism where the patient perspires freely without the steam as where the skin remains dry. The steam benefits the patient more by warming the blood than by causing perspiration. The temperature of the steam should be as high as the patient can bear, and when the patient is oppressed with the heat, apply cold vinegar, or water; or whiskey over the surface.

The patient should be showered after steaming, or washed with spirits, or vinegar, rubbed dry, and the surface bathed with stimulating liniment, No. 6, or pepper sauce.

Injections may be used as the state of the bowels seem to require. When the rheumatism is principally seated in the lower extremities, injections of the third preparation, or of some form of lobelia, in the No. 3 tea, are especially indicated. The circulation in the lower extremities is to a greater or less degree influenced by stimulating injections.

From half to a teaspoonful of lobelia powder administered by injection and retained, and thus repeated every few hours, will prove eminently beneficial in many cases, but more particularly when there is fever.

The parts affected by rheumatism possess a low degree of sensibility in health, but when they become so much diseased as to excite reaction and occasion inflammation, it frequently requires several weeks before the parts are restored to a healthy condition, even under the most judicious and persevering course of treatment. The condition of the stomach, bowels, and liver, influences in a great degree both the violence and duration of rheumatism.

Often requires perseverance in the treatment.

Case.—Mr. J———, whose health had been feeble for two or three years, attended with sallowness of the skin, was attacked with rheumatism, so as to be helpless. I was applied to, and administered two courses of medicine with marked benefit at the time, but he soon relapsed. I give it as my opinion to the patient, who was a man possessing high intellectual attainments, that there was a false membrane coating his stomach and bowels throughout, which must be removed by a persevering course of treatment before the rheumatism could be cured. Discouraged at not finding more permanent relief from the operations he had undergone, he determined on making a trial of the regular practice. Colchicum, and a variety of other remedies were used both internally and externally, but with no good result, on the contrary, with a manifest exhaustion of strength. I received a message requesting me to call on Mr. J——— again. I found him evidently worse than when I left him. He said he had become convinced that what I had previously told him in regard to the false membrane was correct, and desired that a thorough course of treatment should be pursued until the stomach and bowels should be cleared of this false membrane. Accordingly, a thorough course of treatment *was* pursued, and in about two weeks the false membrane began to be discharged, sometimes passing from the bowels in pieces a foot long. At the end of three weeks the patient was cured, and has ever since enjoyed better health than during several previous years.

Where a joint is distorted by rheumatism—for instance, the foot turned in, or the wrist bent, drawing the hand down, or sidewise, the case is generally very slow to recover.

In the earlier stages of rheumatism, the remedies chiefly to be relied upon, are courses of medicine, and the continued use of stimulants and lobelia. In a later period of the disease, astringents and tonics should be also employed.

When rheumatism becomes deeply seated, requiring a long course of treatment, it will be advisable occasionally to change the medicines, or at least to alter the form, or to combine them differently.

Gum guiacum, balsam copavia, oil of juniper, and white mustard seed, have been used with benefit in rheumatism. Patients affected with chronic rheumatism are sometimes benefited by eating raw onions.

Tonics should be used when the disease is on the decline, and the patient clear of fever. More particularly are tonics indicated when the system is in a weak and relaxed condition. Where the case requires the continued use of tonics they may be changed oc-

casionally with advantage. Various kinds of tonics may be used, such as aspen poplar, peruvian bark, guiac shavings, columbo, balmony, quassia, golden seal; or garden bitters, as wormwood and tansy. They may be prepared in decoction, tincture or extract. Thomson's No. 6 is also a good tonic.

The Diet in rheumatism, as in every other disease, should be adapted to the condition of the digestive powers. In the acute or inflammatory form of the disease, digestion is in general either suspended or much enfeebled, requiring the lightest kinds of food, such as crust coffee, barley water, elm gruel, toast and tea, milk porridge, &c. When a patient is suffering acute pain, the digestion is imperfect; and when the stomach is oppressed with food that it cannot digest, the rheumatic pains will be necessarily aggravated.

In a more advanced period of the disease, or when it becomes chronic, a stronger diet may be required, such as soft boiled, or poached eggs, stale bread and butter, moderate quantities of fresh beef, roasted or broiled; mutton, and wild game, together with wholesome vegetables. In some cases animal food agrees with the stomach, and in others an almost exclusive vegetable diet will be most proper.

Local Applications.—There is probably no form of disease in which so many different local applications have been recommended as rheumatism. In some instances local applications are serviceable, and in others they prove almost useless. And again an application that agrees with one case, will increase the pain in another; and the same application that may ease pain in one stage of the disease, may prove entirely useless, or even injurious at another period. In general, however, wool or raw cotton, laid on the parts affected, having the part next the skin covered with scrapings of gum camphor, is as good an application as can be made in inflammatory rheumatism. Wetting the cotton or wool occasionally with No. 6, will be beneficial. Dr. Thomson recommends one part of turpentine to be added to four parts of No. 6, for bathing in rheumatism.

Granvill's Lotion, Volatile Liniment, Stimulating Liniments, or any of the essential oils may be employed in Rheumatism as an external application.

Cayenne poultice.—Equal quantities of cayenne and slippery elm made into a poultice and kept on a joint affected with rheumatism, will do more good than Lotions or Liniments.

In some instances the pain and inflammation will fix upon a part for a day or two and then suddenly change to another place, and in this way will fly from one limb to another; and a part that will

be extremely painful, red and swollen, and tender to pressure, may, in the course of a few hours, be entirely free from inflammation or pain. I attended a gentleman recently affected with acute rheumatism, where warm applications, except steaming, increased the pain, and where almost instant relief was found by applying a cold poultice, made of grated raw potatoes: the disease in this case was confined principally to the feet, not affecting the larger joints. When cold applications are used the patient must take some active stimulant—cayenne, No. 6, or composition.

Long Standing Cases.—Sheet gum-elastic applied around a joint affected with rheumatism will be found signally beneficial in almost every case of chronic rheumatism. The sheet of gum should be washed with soap suds before it is applied, and it should also be taken off and washed at least once in every forty-eight hours. Oiled silk may be used as a substitute for gum-elastic, first applying stimulating liniment to the affected part.

In deep-seated cases of long standing, sea-bathing, cold shower baths, or travelling over a mountainous country will sometimes effect a cure where medical treatment has failed.

When rheumatism attacks the brain or heart, or other internal organs, the treatment must be thorough in the commencement, for if the disease become firmly seated, particularly on the brain, it will sometimes terminate fatally, although the most vigorous measures may have been perseveringly employed. Rheumatism very rarely, however, becomes translated to internal organs under the use of Thomsonian remedies, but it is not an uncommon occurrence under a depleting course of treatment. Almost every writer on medicine furnishes testimony to the danger of copious bleeding in rheumatism, from the liability of the disease being thereby translated to the heart and other internal organs.

During the past winter I attended a young man with a severe attack of *pericarditis*, or rheumatism of the heart. The patient was seldom able to lie down except after a vapour bath and an emetic, but would sit all night in a bent posture, experiencing severe pain from efforts to cough, or to take a deep breath; the pulse was irregular and extremely feeble; there was great oppression of breathing, and the voice low and very feeble; the pain was seated in the region of the heart, the limbs were all affected with rheumatism, and his feet very much swollen. In this case I found no other means so effectual as a course of medicine. The bowels were obstinately constipated, and seldom moved by injections. This patient recovered in the course of a few weeks, under a general stimulating treatment, together with an occasional vapour bath and an emetic. As in all cases that I have attended of seated disease, a false membrane was passed off from the bowels, and flakes of it were frequently thrown up from the stomach by vomiting.

SECTION II.

LUMBAGO—RHEUMATISM IN THE LOINS.

This form of rheumatism is to be treated upon the same general plan as that recommended for rheumatism, namely: by courses of medicine; pure stimulants; astringent, or "canker medicine;" and finally by tonics.

Twenty or thirty drops of the spirits of turpentine, three or four times a day, is an effectual remedy in many cases of lumbago. The use of the turpentine, and an occasional vapour bath, together with a strengthening plaster to the back, may succeed in curing light cases. The stomach and bowels, however, are in most instances disordered, and require a course of medicine, and the use of stimulants, such as capsicum and composition, prickly-ash, No. 6, &c.

Prickly-ash.—This medicine in decoction, taken freely, is decidedly useful in chronic rheumatism wherever it be located. The prickly-ash, finely pulverized, may be added to the spice bitters in the proportion of one part of the former to four parts of the latter.

SECTION III.

GOUT.

Gout is a constitutional disease, being always connected with a disordered state of the digestive organs. The disease usually comes on by fits or paroxysms, and the attacks in most instances occur at night. The pain is generally seated in the ball of the great toe, though it is liable to attack other parts of the limbs, and also internal organs, more especially the stomach and kidneys.

Its hereditary tendency.—Some families are peculiarly predisposed to gout, almost every member of a family being more or less affected by it in advanced life, when the digestive powers usually fail. This hereditary tendency to gout may be transmitted from parents to children, through several generations. The same debilitating cause that would produce gout in one

predisposed to the disease, might occasion pleurisy, erysipelas, or some other form of disease in another.

Not confined to the luxurious and indolent.—Gout prevails most among high livers, still it does occasionally attack individuals who have lived temperately, and have led an active life. In every case of the kind, however, that I have had a knowledge of, the patient was dyspeptic, and a general torpor or want of vital energy prevailed.

Causes.—When there is a predisposition to gout, an attack may be brought on by almost any debilitating cause, such as exposure to cold or dampness, over exertion, or taking more food into the stomach than can be digested, thus causing debility of the general system. The disease is most apt to occur in persons of a peculiar confirmation of body, with alimentiveness large, and who are habituated to eating largely of the richest kinds of food, together with the free use of wine and brandy. At length the digestive powers become enfeebled. The habit of eating heartily having become established, more food is taken than the stomach can digest; the imperfectly digested food form acids, the general system becomes disordered, and gout follows.

When this disease attacks individuals who lead an active life and are temperate in their habits, it is owing to constitutional disorder; the general health being more or less impaired previously to the gouty attack.

The Symptoms of Constitutional Disorder which generally precede an attack of Gout, are, uneasiness and distress at the pit of the stomach; frequent belching of wind; sour eructations; furred tongue; a sense of tightness and weight in the abdomen: "giddiness; great lassitude; yawning, and stretching of the limbs; cramps in the muscles of the legs; drowsiness, with disturbed sleep, depressed spirits, and debility. In some instances a disagreeable itching of the skin comes on a few days previous to the attack, and in most cases the urine has a deep red colour." Coldness of the extremities, with a sensation of numbness is very often experienced before an attack of gout.

Characteristic Symptoms.—In most instances an attack of gout commences at night. It is attended by severe pain, tenderness, and throbbing in the ball of the great toe, chilliness or rigors, soon followed by reaction; the skin becomes hot and dry, and the pain violent and throbbing, as though there was a continued succession of electric shocks passing through the tender part. At the approach of daylight, the pain abates, and a profuse perspiration ensues. "In some instances the pain and fever continue with unabated

violence, until about the middle of the following night, when they decline under a moderate flow of sweat—the patient sinking into a quiet sleep towards morning. In very severe attacks, however, no obvious remission of the symptoms takes place, until the third or fourth morning. Yet in all instances, the sufferings of the patient are greater during the fore-part of the night than in the day. When the affected part is examined in the morning, after the accession of the paroxysm, it is found swollen, red, and the veins of the foot greatly distended with blood." The tenderness is so great, that the least pressure or motion in the part, occasions excruciating pain. The temper during the paroxysm, is irritable, the patient being difficult to please.

The duration of the first attack of gout, varies from four or five to eight or nine days; "but in subsequent attacks, it is often protracted beyond the second, or the end of the third week. After the disease has subsided in one foot, it sometimes attacks the other, and passes regularly through its course as in the first instance.

After an attack of gout the general health of the patient is usually much better than it was for some time previous to the attack. The disease however returns at longer or shorter intervals: in some instances only once in a few years;—in others every year, and after the constitutional energies become greatly enfeebled, the patient will seldom be entirely clear of it, excepting during mid-summer.

Chronic Gout.—From great exhaustion of constitutional energy, gout is apt to assume the chronic form, and instead of occurring in paroxysms at different periods, the parts become permanently affected, not with acute inflammation, but by "chronic, wandering and irregular pains, bearing much resemblance to chronic rheumatism."

"The pain in chronic gout is usually moderate during the day, the patient experiencing only a sense of alternate heat and coldness in the affected parts; at night, however, it is generally severe and aching. A feeling of numbness and weight is experienced in the diseased parts, slight cramps are apt to occur during the fore-part of the night, and the sleep is restless, and interrupted by sudden startings. The affected joints retain their natural, or present only a slight purplish hue; but they become œdematous, tender, and more or less stiff, and the neighbouring muscles are weakened or diminished in size. The inflammation often passes successively from one joint to another, or leaves its original seat, and fixes upon some distant joint, and after having remained there for awhile, returns to the part it had left."

"There is rarely any very conspicuous fever; but the digestive and biliary organs are generally very prominently deranged. The dyspepsia attending this form of the disease is particularly characterized by great oppression, and flatulent distention of the stomach

after a full meal, together with heartburn, and occasionally a sense of coldness in the stomach. The bowels are usually torpid or affected with mucus diarrhœa, the urine is turbid, and often charged with mucus; the skin dry, contracted, and sallow; the bilious secretion deficient; and both the animal and vital functions much impaired. The temper in this variety of the disease is always very irritable, dissatisfied, morose, irresolute, and sometimes gloomy or hypochondrical.

Gout is not exclusively confined to external parts, but is liable to attack the stomach and other internal organs, and also the brain. Cold applications to the diseased extremities, copious bleeding, continued active purging, or any other debilitating influence may occasion gout to be translated to internal parts. "When an acute attack of gout passes to the brain, coma, furious delirium, or symptoms of apoplexy, speedily ensue." When it fixes upon the stomach, violent cramps or spasms of this organ ensue, which in many instances terminate fatally, or reaction becomes established, exhibiting symptoms of inflammation in the stomach.

Treatment.—A paroxysm of gout will require the same general plan of treatment as any other violent attack of disease. A course of medicine will relieve the violence of the symptoms and assist in bringing about a crisis.

In the premonitory stage before the reaction or pain comes on, a course of medicine will lighten the severity of the pain, and shorten the paroxysm.

Treatment during the paroxysm.—An attack of gout should be treated in the same manner as a case of bilious colic, or inflammatory rheumatism; applying the remedies as the urgency of the symptoms may require. The bowels to be relieved by the use of enemas; the system warmed by the vapour bath, and the stomach cleansed by emetics. During the paroxysm, the vapour bath may be administered frequently, provided the patient finds relief from it. The capillary vessels should be relaxed by the free use of lobelia, either given by the mouth or administered by injection and retained.

Emetics.—Free vomiting will sometimes relieve the pain after all other usual means have failed. After vomiting, the patient should take capsicum tea freely; or a teaspoonful of the third preparation of lobelia, in a tea cup half full of composition or bayberry tea, frequently repeated. In very severe cases I have found it necessary to repeat the above named doses at intervals of fifteen or twenty minutes, and continue them for hours in succession.

The compound lobelia pills, or pills made of equal parts of brown lobelia, cayenne, super-carbonnate of soda, may be em-

ployed as a general remedy, between courses of medicine, and in all cases where the patient can take them better than decoctions.

If the tongue be thickly coated, and more especially when the fur on the tongue begins to soften, an occasional dose of bayberry or sumac tea must be given to cleanse the stomach of canker.

Tonics.—The stomach having been cleansed, and the secretions restored, tonics must be employed. Peruvian bark, quinine, quassia, Thomson's No. 4 bitters, or any of the usual vegetable bitters. Injections of a strong tea of Peruvian bark administered and retained will answer a good purpose.

Injections.—Much benefit may be derived from an occasional enema, made actively stimulating with the third preparation of lobelia: when there is much fever it will be proper to administer an injection of lobelia powder in lukewarm water, to be retained, and repeated until the system becomes more or less relaxed under their influence. In some, this treatment will cause a great degree of relaxation, in others, the bowels may be almost insensible to the impression of the lobelia, and scarcely any visible effects be produced.

Local Remedies.—In general, stimulating and volatile liniments afford more or less relief. The parts should be wrapped in flannel or cotton, provided the pain be not increased thereby.

Intermediate Treatment.—After a paroxysm of gout, the treatment should be directed to effect a restoration of the general health, and thus to overcome the liability to another attack.—This may in many instances be accomplished by an occasional course of medicine, together with pure stimulants, the "anti-canker medicine," and at a proper time the use of powerful tonics. The continued use of the compound lobelia pills at night, will have a good effect on the bowels. In some cases where individuals are subject to attacks of gout, the habit of eating too freely of rich food has become so fixed with them that the stomach continues to be oppressed with more food than can be digested, and thus the patient is subjected to continued returns of gout.

In the chronic form of gout, besides an occasional course of medicine, the use of strong infusions of vegetable bitters, or the free use of quinine, will be required. Gum guiacum, spirits of turpentine, and savine, (juniperus sabina) may also be found useful in the chronic form of the disease.

Gout in the Stomach or Kidneys.—When the stomach or kidneys become affected with gout, the same general course of treat-

ment, as already described, must be adopted. The stomach in these cases, however, is very often almost insensible to the impression of stimulants, requiring large and frequently repeated doses of the 3 preparation of lobelia. Hot stimulating poultices should be applied over the seat of the pain, and the steam bath administered as hot as the patient can bear. If the kidneys be affected, injections must be employed. They should be made active with cayenne and lobelia, or the 3 preparation, and administered frequently.

CHAPTER VII.

SECTION I.

INFLAMMATION OF THE KIDNEYS.

The kidneys may become diseased from various causes, such as exposure to cold and dampness, intemperance, blows, contusions, and strains, the use of cantharides and other irritating diuretics, translated rheumatism or gout, and the formation of gravel in the kidneys. Where there is constitutional weakness in the kidneys, they may become diseased and take on inflammation by almost any debilitating influence, but more especially from cold and damp feet.

Symptoms—Arising from disorder of the general system, or from exposure to cold, constitutional derangement, such as chilliness and languor, loss of appetite, torpid bowels, flushes of heat, and fever, precede inflammatory action in the kidneys. When this takes place there is tenderness to pressure, and pain in the region of the kidneys, which is greatly aggravated by a sudden jar, from making a false step, or by suddenly bending the body forward. The pain is apt to shoot down towards the bladder and thighs. "With these symptoms are usually conjoined fever, nausea and sickness, retching and vomiting, colicky pains and constipation. The urine assumes a variety of appearances,—it may be high coloured, ropy, depositing sediment, fœtid, or bloody.

Acute Inflammation of the kidneys generally terminates favour-

ably, except when it occurs in constitutions broken down by debauchery, or the vital powers greatly depressed by other causes.

The Favourable Signs are a subsiding of the pain; a general warm perspiration; a copious discharge of urine, generally either turbid or charged with mucus; cleaning of the tongue; and subsidence of the sickness and vomiting.

Where acute inflammation of the kidneys does not terminate in resolution (the restoration of natural action) by the seventh or eighth day, *suppuration* may ensue, and an *abscess* be formed.

The symptoms denoting the formation of an abscess, are shiverings and fever, occurring at irregular intervals, resembling ordinary *ague* or *hectic fever;* a pulsating pain in the kidney; a feeling of heaviness or numbness in the affected part; and great irritation of the bladder and urethra. Abscess of the kidney may "point externally, and be discharged, or it may open into the abdomen, and occasion severe and fatal peritonitis." In other instances the matter passes down the ureters into the bladder, and is discharged with the urine. In some instances an abscess will continue to discharge in this way for many months, and even years.

Treatment.—Inflammation of the kidneys occasioned as it is in almost every instance by derangement of the general health, demands for its cure the general plan of treatment required in all acute or recent attacks of disease. It is therefore not necessary to know whether the kidneys be affected or not, in regard to the course of treatment to be pursued, as *Thomson's regular course of medicine* is adapted to the cure of all sudden attacks of inflammation and pain, in whatever part it may be located.

In recent attacks, attended by violent pain, the course of medicine should be repeated daily, and the system be kept under the influence of lobelia to cause relaxation of the capillary vessels, and remove the obstructions to the circulation of the blood. Straining efforts to vomit will not increase the pain, except momentarily, when the system is relaxed.

Injections.—The kidneys may be greatly influenced by medicines administered by injection. To move the bowels the injections should be made stimulating, and contain a portion of lobelia. When the skin is hot and dry, the secretions of the mouth suspended, and the pain in the kidney severe, lobelia should be administered by injection with the view of producing continued nausea, and the patient should take freely of pennyroyal or other simple herb teas, and an occasional dose of pepper or composition.

The Vapour Bath.—From the close sympathy existing between

the skin and the kidneys, the vapour bath will prove highly beneficial, and may be administered frequently. Where the patient cannot bear the fatigue of sitting up, the steam should be applied to the patient on a couch or mattress. Not only is the vapour bath useful by exciting perspiration, but it attracts the blood to the surface and thus lessens the undue determination to the diseased part. The same effect is produced by the emetic. The vapour bath is more especially indicated where the secretion of urine is nearly, or wholly suspended. For where the functions of the kidneys are suspended, those of the skin should be promoted, otherwise the urea will remain in the blood and occasion serious consequences. In some instances, however, the patient requires to be kept in a state of perfect rest, and other means should be used for promoting perspiration, such as warm fomentations to the loins, and hot bricks wrapped in damp cloths placed at the feet. Warm drinks should be taken, composition, pennyroyal or dittany tea. The foregoing treatment to be persevered in until the disorder abates.

Astringents, or anti-canker medicine.—After the pain has subsided, and more especially if the patient's tongue be coated, a strong tea of sumac leaves, berries or bark, or of all combined, should be taken, adding a portion of cayenne; and after the tongue becomes clean, *tonics* must be given. A strong tea of poplar bark may be used.

To stimulate the kidneys to action, after the inflammation has abated, balsam fir, balsam copavia, spirits of turpentine, or oil of juniper may be employed.

The Symptoms of Calculi, or Gravel in the Kidneys, independently of inflammation, are—excruciating pain in the region of the kidneys down to the bladder; constant sickness at the stomach, with frequent retching and vomiting; pain in the inside of the thigh; retraction and pain in the testes, and stranguary.

The gravel may pass off and give perfect relief, or the paroxysms may continue, and inflammation ensue.

I visited a patient who had symptoms of gravel in the kidneys, under the care of Dr. Fonerden. The patient had taken two or three courses of medicine, and at the time I saw him, the system was very much relaxed under the influence of lobelia, and he had what are termed the alarming symptoms; and the family of the patient being unacquainted with the effects of the medicine, were much alarmed. During this relaxation, the patient in voiding urine, passed a calculous or gravel stone, about three-quarters of an inch in length, as thick as a common goose quill, and was immediately relieved.

Gravel in the kidneys arises from a disordered condition of the digestive organs, and is generally associated with full living, particularly in persons predisposed to gout.

When the calculi are first formed in the kidneys, they are generally of acid deposites. The urine will be high-coloured and will change litmus paper to red, and deposits a sediment of red, yellow, or pink colour on standing. This acid character of the urine frequently attends childhood and persons about the age of forty.

As the constitutional energies become more enfeebled, the character of the gravel is apt to change from that of an acid to an alkaline deposite; the urine becomes pale, and deposites a white sediment or crust on standing.

Treatment of Gravel in the Kidneys.—To relieve the pain, and facilitate the expulsion of the gravel, and at the same time to lessen the tendency to severe inflammation, a regular course of medicine will prove most effectual.

Besides the course of medicine, injections of the lobelia powder should be given occasionally with a view to relax the system, and lessen the determination of blood to the kidneys. A teaspoonful or two of the third preparation of lobelia, in a teacup half full of bayberry tea, should also be given every hour or two, when the pain is severe, and cloths wrung out of hot water applied to the loins. Whether the disease be gravel or inflammation in the kidneys, lumbago, gout, or rheumatism, the treatment here recommended will be proper in each case.

Alkalies should be used in combination with the other medicines, when the urine is high-coloured,—sal æratus or the bi-carbonate of soda; the former is to be preferred. Alkalies may be occasionally used, as long as the urine indicates the existence of acid. The sal æratus or soda may be added to sumac or poplar bark tea.

Acids.—When the urine is pale, and deposites a white crust, or sediment, acids should be used, as vinegar, or the pepper sauce, especially at meals. Lemon juice may be used in drinks, or a beverage may be made of other kinds of acid fruit.

Predisposition to the formation of gravel is to be overcome by restoring the general health by the use of pure stimulants, "anti-canker medicine" and tonics, besides the use of alkalies or acids, as the case may require. An occasional course of medicine will be very useful to restore the general health.

Confirmed or Chronic disease of the Kidneys.—The kidneys may be diseased in various ways. Acute inflammation may terminate in a sub-acute or chronic inflammation; and again the function, and even the structure of the kidneys may be very much diseased without inflammation. In some instances the kidneys have been

diseased to a great extent, the patient at the same time scarcely sensible of it. In cases of this kind, the complexion of the patient will present a dirty pale appearance, and there will be somnolency, or an unusual tendency to stupor.

Treatment.—In confirmed disease of the kidneys, besides general constitutional treatment, stimulating diuretics should be employed, such as vegetable balsams, spirits of turpentine, and oil of juniper.

Change of Air.—In deeply seated complaints, benefit is derived in many cases, from a change of residence, where medicine fails of effecting any permanently good result. A few weeks' residence at the sea shore, or in a pine country, or among mountains; at the mineral springs, Schuyley's mountain, Saratoga springs, and other like places of fashionable resort, has in many instances renovated the general health, and removed the tendency to gravel, where medical treatment had failed.

SECTION II.

INFLAMMATION OF THE BLADDER.

This is a disease of rare occurrence, except in a chronic form, the bladder not being liable, generally, to acute inflammation.

Causes.—Acute inflammation of the bladder is sometimes occasioned by repelled gonorrhœa. It has also been produced by the use of cantharides, (Spanish flies,) and by the excessive use of turpentine. The disease is accompanied by a disordered state of the digestive functions. Inflammation of the bladder may also be brought on by injuries inflicted by blows, retention of urine, or by the use of forceps in labour, or by the injudicious introduction of the catheter. When the bladder is predisposed to disease, exposure of the feet to cold and dampness may occasion inflammation, —still the disease is of rare occurrence.

The Symptoms are,—an almost constant desire to pass urine; burning pains in the region of the bladder, which frequently shoot through the testes, and down the thighs; and extreme *tenderness* in the region of the bladder. The patient is seldom able to pass much urine, and that which is voided is of a deep red colour, and frequently tinged with blood. There is much distress at the sto-

mach, with sickness and vomiting. The bowels are costive, and if the inflammation extend to the rectum there will be generally more or less dysenteric symptoms.

More or less REACTION attends acute inflammation of the bladder. The skin is dry and hot, the pulse quick, the tongue coated and dry, with excessive thirst; the patient is extremely restless, and the countenance is expressive of great anxiety. When the neck of the bladder is inflamed, there will be retention of urine, and any attempts to introduce the catheter or bougie, causes extreme suffering.

Terminations.—Inflammation of the bladder may terminate either in resolution, suppuration, gangrene, or a thickening of the coats of the bladder.

Favourable Signs.—When the inflammation is about to terminate in *resolution*, which signifies a restoration of the parts to their natural condition, there will be general perspiration, with a uniformly warm skin; subsidence of the pain; the parts less tender to pressure; and a free discharge of urine, with but little pain.

Suppuration.—Inflammation of the bladder very rarely terminates by suppuration. When this does occur, the pain and fever are lessened; the patient experiences chills or rigors, and a white matter is discharged with the urine.

Gangrene occurs much more frequently than suppuration. When gangrene is about to take place, the pain and fever suddenly cease; there is great prostration of strength; "cold extremities; profuse and clammy perspiration;" pulse weak and frequent; hiccough; confusion of mind; and a death-like expression of countenance.

Sudden and severe attacks of acute inflammation of the badder usually run their course to a favourable or to a fatal termination, by the seventh or ninth day. In some instances the disease becomes seated, or as it is expressed in medical language, the inflammation assumes the *chronic* form.

Treatment.—Severe attacks of inflammation of the bladder, require ENERGETIC treatment in the early period, and a persevering course to be continued until the disease abate, or the case prove hopeless of cure. As in all severe attacks of disease, REPEATED *courses of medicine* must be chiefly relied upon, or the system kept under the influence of lobelia, which will aid in equalizing the nervous influence, and will promote perspiration.

Injections to the bowels must be used freely in order not only

to remove their contents, but also to influence the action of the bladder. The lobelia powder, administered by injection, and retained, will tend to relax the neck of the bladder, and favour the escape of urine ; and besides this, it fulfils other important indications, equalizing nervous influence, and promoting the various secretions. Occasionally lobelia administered in this way will produce sickness and vomiting, and greatly relieve the pain in the bladder.

The Vapour Bath is useful in inflammation of any internal organ or tissue. It attracts the blood to the surface, and powerfully assists to equalize its circulation ; it relieves pain ; aids the efforts of nature to overcome obstructions ; and renders the system more susceptible to the impressions of medicine. The bath is to be repeated as the circumstances of the case may require ; and if the patient find relief by the bath, it may be administered very frequently. If, however, the patient be more easy when kept quietly in bed, with warm poultices applied to the parts, the bath may be disused for the time. Most physicians of the old school recommend the vapour bath in this disease.

Poultices composed of Indian mush and flaxseed, stewed an hour or more, then adding ginger and green lobelia, or composition powder, must be constantly applied to the abdomen. A poultice prepared by stewing wormwood and tansy in vinegar, and thickened with Indian meal or slippery elm, may be used.

Diet.—During the active stage of the disease, the stomach will not digest any food except it be of the most bland and mild character,—elm gruel, flaxseed tea, adding a small portion of loaf sugar,—barley water, and crust coffee.

If the tongue be thickly coated, the patient should take occasionally a strong decoction made of sumac leaves and berries, adding a portion of cayenne, or of the third preparation of lobelia. This preparation is also well adapted to those cases where suppuration occurs in the bladder, or the inflammation assumes the chronic form.

Chronic Inflammation of the Mucous Membrane of the Bladder is a common form of disease.

Symptoms.—"Slight lancinating pains, attended with a sense of burning in the region of the bladder, and a feeling of weight and tenderness in the perinæum ; frequent and harassing desire to pass urine, with occasional spasmodic action of the bladder and urethra. The urine is loaded more or less with a tenacious mucus.

Slow fever generally attends, accompanied with thirst; general debility, particularly about the back and loins; and in protracted cases, much emaciation and exhaustion supervene. There is, generally, considerable derangement of the digestive functions; loss of appetite; sometimes nausea and vomiting; costiveness; tongue covered with a white or brown fur; and the skin is harsh and dry.

Chronic inflammation of the bladder is often associated with gout, and scrofula. It prevails most in the aged and infirm, and more especially in the *intemperate*.

Treatment.—Chronic inflammation of the bladder is to be cured by a course of treatment best adapted to restore the general health, together with stimulating injections to the bowels, composed of a strong decoction of sumac leaves or berries, adding a portion of cayenne and lobelia; and a free use of an infusion or tea, of either pipsissewa: sumac bark, leaves, or berries; uva ursi, or bear berry; or buchu. In disease of the urinary organs, honey should be used in the place of sugar to sweeten the teas with, unless the former is found to disagree with the stomach. An infusion of peach tree leaves is highly spoken of by some practitioners. Balsam copaiva has been used with much benefit in this disease. Equal parts of balsam fur and tincture of myrrh, shaken together in a phial may be employed with benefit in seated disease of the kidneys or bladder.

An occasional Course of Medicine, and the patient kept in a perspiration for several hours after, will in general prove the most effectual method for the cure of chronic as well as acute inflammation of the bladder.

When the patient is infirm and far advanced in life, it will generally be useless to attempt to effect a cure, more especially if the disease be of long standing. The treatment in such cases should be of a palliative character.

The same symptoms that accompany chronic inflammation of the bladder attend also disease of the prostrate gland, stone in the bladder, stricture of the urethra, and ulceration of the neck of the bladder. The constitutional treatment, however, will require to be the same in each case under similar conditions of the general health. Thus if the stomach be disordered, an emetic will be proper whether the patient be affected with stone, or with simple inflammation of the bladder. If there be retention of urine from spasm of the neck of the bladder, or from stricture of the urethra, the vapour or warm bath, and injections to the bowels, to relax the parts, will be equally applicable in either case.

A German applied to me affected with retention of urine, and the introduction of a catheter twice a day had been required for

the three preceding weeks. A full course of medicine was given, and he did not need the use of the catheter after. Even where retention of urine is occasioned by stone in the bladder, a full course of medicine may overcome the difficulty in many instances, although permanent relief is not reasonably to be expected by it. Where there is a stone in the bladder it can be removed only by an operation.

In all cases of disease of the urinary organs, especial care must be taken to protect the feet from wet or dampness.

SECTION III.

DIABETES—EXCESSIVE FLOW OF URINE.

The more prominent Symptoms, of this form of disease, are—a profuse discharge of urine; excessive thirst; voracious appetite; clean tongue; dry skin; and wasting of the flesh.

Character of the Urine.—Various derangements in the system may exist accompanied by an increased flow of urine, but essentially different from diabetes. Diabetic urine contains sugar, giving it a sweet taste and smell; "and if dropped and partly dried upon linen or paper, it is glutinous and adheres to the fingers. The amount of urine discharged varies in different cases, but it is always very great; and in some instances seven or eight quarts have been discharged in the course of twenty-four hours, and this continued for several weeks in succession.

Causes.—A depraved state of the digestive functions, and an exhausted state of the vital powers, are the essential causes of this complaint.

The disease prevails commonly in old age, and in constitutions broken down by intemperance or debauchery. It sometimes prevails in children after protracted cholera infantum.

The disease difficult of cure.—Occurring as a consequence of a worn-out or broken-down state of the system, genuine diabetes is very rarely cured. Recoveries from it, however, do happen under a judicious and persevering course of treatment.

Where the disease is not overcome, the strength and flesh continue to waste, hectic fever occurs, and frequently consumption of the lungs, dropsy, or apoplexy supervene.

Instances have occurred in which several members of the same family died of diabetes, thus showing, as it would seem, a hereditary tendency to the disease.

The disease, in some instances, terminates its course in a few weeks, whilst in others it will continue for many months, or even years.

Treatment.—The important indications are to restore the digestive and nutritive functions. To accomplish this, the chief dependence must be upon courses of medicine in the *early* stage of the disease. There are no means so effectual in revolutionizing the system and in restoring the important vital functions, from a diseased, to a more healthy condition, as the regular *courses of medicine.* Yet in diabetes, unless administered in the very onset of the disease, and under favourable circumstances in relation to the constitutional vigour of the system, even these will be found unavailing. If the constitution be broken down, or the patient advanced in life, it would not be advisable to subject the patient to any unpleasant operation by medical treatment, for under these circumstances there cannot be a reasonable hope entertained of effecting a cure. It must be borne in mind, however, that the system is liable to disorders attended with a profuse discharge of urine, differing *essentially* from diabetes. True diabetes is comparatively a rare complaint; whereas an excessive flow of urine is of frequent occurrence.

Repeating the Course of Medicine.—In the early stage of the disease the course of medicine may be frequently repeated, provided the patient experience benefit by the operation. When the condition of the stomach does not require the emetic, the bath may be applied daily, with a view to increase the action of the skin, and cause a determination to the surface. The vapour bath may also have an influence in changing in some degree, at least for a time, the thickened state of the blood, which in diabetes is observed to be thick like molasses, probably owing to a loss of its natural temperature, and a weakened state of circulation. The caloric and electricity imparted by the vapour bath, exert a most decided influence in vitalizing the blood, by facilitating its circulation through the lungs, and by restoring its natural temperature. The patient should be showered with cold water at the close of the steaming, unless it be found to occasion chilliness afterwards. A sudden shock to the system in this way is always beneficial, provided the patient has heat enough to react against the cold. When the patient is too feeble to bear sitting up, the vapour bath may be applied in bed, and in this way a moderate perspiration continued by it for an hour or two. When the skin is very dry and harsh, it may be difficult to excite perspiration, and the patient will con-

sequently be more or less oppressed with heat, and require frequent sponging over the face and body with tepid water, or vinegar and water until perspiration be brought on. Capsicum tea or other stimulants should be given, together with nauseating doses of the tincture of lobelia.

The sumac leaves and berries made into a strong decoction, adding a portion of cayenne, will be proper to be occasionally given; and during the first period of the disease, frequent doses of the tincture of lobelia, or the compound lobelia pills, should be administered.

Tonics will be proper, more especially when the symptoms assume a more favourable aspect. Quinine or any of the vegetable bitters may be used; and occasionally change them.

The No. 3 pills may be used as a substitute for the sumac tea, if the patient prefer this convenient form.

Stimulating liniments, pepper sauce, or No. 6, should be applied to the surface of the body and limbs, after a vapour bath, and friction to the skin daily persevered in.

Diet.—The food must consist of the most nourishing kind that the stomach will bear. Eggs, beef, mutton, milk, &c., answer well in many cases. Meat, in the early period of the disease, however, and more especially if there be fever, may be improper.

Vegetables, in most instances, disagree with the stomach, and in some cases, even a small piece of bread will do injury. It is important in diabetes that all kinds of food that furnish sugar should be avoided. Hence almost every vegetable substance is inadmissible. The gleuten of wheat may be used, as this cannot become converted into sugar in the stomach.

Animal Food is recommended in diabetes. In some instances, however, it will not suit the stomach,—when custards, eggs, milk porridge, &c., may be substituted.

From the feeble state of the digestive powers, and the voraciousness of the appetite, there is an extreme liability to eat more than is proper.

The clothing should be very warm, and especial attention is necessary to keep the feet dry and warm.

Exercise in the open air is beneficial where the patient is able to get out, either to walk or to ride.

Diabetes, however, is very seldom cured, when it occurs in depraved, or otherwise broken down constitutions: these commonly form an insuperable barrier to the success of the practitioner, though a ray of hope may be still held out, as in the most desperate cases cures are sometimes effected.

SECTION IV.

RETENTION OF URINE.

(*Inability to discharge Urine.*)

The urine may be retained in the bladder either from inflammation or constriction in the neck of the bladder; mechanical obstructions in the neck of the bladder or urethra; or from a loss of the power to contract the bladder, and expel its contents.

1st. *Inflammation in the Neck of the Bladder* is one of the most common causes of obstruction to the passage of urine. The inflammation may arise from a diversity of causes, such as the application of fly blisters to any part of the body or limbs; the internal use of turpentine, or cantharides; disease of the prostrate gland, or of other parts in close sympathy with the bladder; exposure to cold and dampness; an acrid state of the urine; repelled gonorrhœa; and constitutional disorder, more especially in gouty patients.

2d. *Mechanical Obstructions.*—These are gravel in the neck of the bladder, or urethra; stricture of the urethra; enlargement of the middle lobe of the prostrate gland; prolapsus uteri; and pressure of the uterus upon the neck of the bladder during pregnancy.

3d. *Paralysis, or a loss of power to contract the Bladder,* occurs from injury of the brain and spinal marrow; palsy of the lower half of the body; malignant disease, as typhus fever; blows or falls upon the back; over-distension of the bladder from retention of urine caused by mechanical or other obstructions; injuries sustained during child-birth; and from exhaustion of nervous power through bad habits or from old age.

Treatment.—Whether the retention of urine be occasioned by inflammation, or spasm in the neck of the bladder, or urethra, or from mechanical obstruction, the constitutional treatment proper in the one case, will be applicable in the others. Mechanical obstructions, however, in many instances, require other means besides constitutional treatment.

In ordinary cases, retention of urine may be relieved by evacuating the bowels by injections containing a portion of lobelia, together with the use of means for equalizing the circulation, and producing

perspiration, by hot stimulating teas, and the vapour or warm bath, or a blanket wrung out of hot water, folded several times, and laid over the abdomen; or by applying a bag of hops, wet with hot vinegar, to the region of the bladder.

Injections.—One of the most effectual remedies for stoppage of urine, is the use of injections of lobelia powder, in lukewarm water, and caused to be retained in the bowels. This, together with the application of warmth to the surface, as above mentioned, will seldom fail of removing the difficulty, unless the retention should arise from gravel in the urethra, or neck of the bladder, or from other mechanical obstructions. Even when there is a mechanical obstruction, the above means should be used, with a view to relax the parts, which will not only afford relief, but will render the removal of the mechanical obstruction less difficult. Medical men resort to tobacco injections, in severe cases, for the purpose of producing relaxation. This, however, sometimes produces serious consequences, from the poison of the tobacco being absorbed into the blood. The lobelia will answer every good purpose that could be desired from the tobacco, and without any risk to the patient of bad consequences from its employment, even in large quantities: it contains no poisonous properties. In aggravated cases it may be found necessary to use powerfully stimulating injections to the bowels, with a view to prevent stagnation of the blood, in the diseased parts. For this purpose, the liquid of the third preparation of lobelia will be proper, and may be used in larger or smaller quantities, as the case requires.

The Vapour Bath fulfils several important indications in the stoppage of urine. It seldom fails of affording more or less relief from pain, and, in some instances, will be sufficient, when well applied, to remove the obstruction, more especially when it is occasioned by inflammation, or spasmodic contraction in the neck of the bladder, brought on by exposure to cold and wet.

Emetics.—In some instances retention of urine is associated with extensive derangement of the stomach, so that emetics may be found not only advantageous, but necessary; and when the obstruction is not overcome by the means above mentioned, it will be proper to give an active emetic of the third preparation of lobelia, or some like preparation, such as the brown lobelia, given in bayberry tea, adding a teaspoonful of capsicum to each dose. The vapour bath previous to the emetic will render the latter more effectual.

Retention of urine is always more or less dangerous when continued over twenty-four hours without any urine passing. It is therefore highly important to persevere in the treatment until the

obstruction be partially or wholly removed. Thus in some cases it may be found necessary to keep the patient fully relaxed, for many hours together, under the influence of the lobelia injections, and also to repeat the emetics every two or three hours, together with the frequent application of the vapour or warm bath, or a constant moist heat kept around the patient. The drink should consist chiefly of elm gruel, flaxseed tea, watermelon-seed tea, barley water, &c. It sometimes happens, though very rarely, that a patient will be several days without passing water and yet experience no serious injury from over-distension of the bladder. I have a patient at this time, who has on several occasions been a week without passing water.

Introduction of the Catheter.—When the catheter can be introduced it gives instant relief, but when the urethra or neck of the bladder is highly inflamed, it will be worse than useless to attempt to pass a catheter. When the system is fully relaxed, the catheter may, in some instances, be introduced by one acquainted with the proper manner of using it. Much harm, however, often arises by repeated attempts to pass the catheter when there is much inflammation. It is in *paralysis* of the bladder that the use of the catheter sometimes becomes indispensable. But in those cases attended with a burning pain in the neck of the bladder, with tenderness to pressure, and a continued and painful desire to pass urine, the catheter cannot be introduced safely even by the most skilful surgeon, and every attempt made to introduce it, only tends to increase the difficulty. First employ means for equalizing the circulation of the blood and of the nervous fluid, and relax the system by lobelia, and when the symptoms of irritation of the neck of the bladder disappear, the catheter may be introduced if necessary.

Scabious (*Erigeron Philadelpheum.*)—A strong tea of this herb, drank freely, has proved of great benefit in cases of retention of urine from irritation of the neck of the bladder. The addition of honey not only improves the taste of the tea, but it increases materially its diuretic properties.

Tapping the Bladder.—When gravel is lodged in the neck of the bladder, or in the urethra, and in cases of stricture, every effort to overcome the obstruction may sometimes prove abortive. Under these circumstances, the last and only resource is in tapping the bladder, as the only means of saving the patient's life. This operation, of course, will demand a surgeon, and one who is fully acquainted with the anatomy of the parts.

In retention of urine from falling of the womb, or from its retroversion, the introduction of a bougee may be sometimes necessary.

Treatment of Retention of Urine from Paralysis of the Bladder.—The chief dependence here must be in the use of the catheter, stimulating injections to the bowels, together with the employment of such remedies as tend to give tone to the bladder, either by general constitutional treatment, when the circumstances of the case require it, and by the use of stimulating diuretics, such as the oil of juniper, balsam of fir, or Peruvian balsam.

In low forms of fever, the bladder, in some instances, looses the power to contract and expel the urine, and becomes greatly distended, which, if not relieved, may occasion serious consequences. This should be borne in mind by those who have the charge of patients very ill of typhus, or other malignant forms of fever; and when there is evidence of a great accumulation of urine, as will be manifested by a hard tumour in the right side of the belly, means should be used for evacuating it; and when hot fomentations to the abdomen, and stimulating injections to the bowels fail of producing a discharge of urine, it should be drawn off by the introduction of a catheter.

In severe injuries of the back, paralysis of the bladder frequently occurs, and requires the repeated use of the catheter until the power of contraction is restored to the bladder.

When it depends upon the debility consequent upon old age, then fresh air, vapour baths, friction to the surface, stimulating diuretics, and if the patient can bear it, occasionally a shower bath in the morning must be employed. The urine should be drawn off before the bladder becomes greatly distended, for if this be permitted to occur, it tends still further to weaken the bladder. In some instances, to prevent distention of the bladder, the use of the catheter will be required three or four times in the course of twenty-four hours, in order to afford an opportunity to the bladder to regain power to contract and expel its contents.

Onions mashed fine, and applied to the perineum, are said to have had a good effect, in many instances, in restoring the tone of the bladder.

SECTION V.

STRANGUARY.

(*Difficulty and Pain in Voiding Urine.*)

When the urine is voided with great difficulty, and in small quantities, attended with severe burning pain, and a continued desire to urinate, it is called *stranguary*. The difference, therefore,

between stranguary and retention of urine is, that in the former, the urine passes, though it may be by mere drops, and attended with a painful desire to void it; whereas in the latter, there is a complete obstruction to the passage of urine.

Causes.—Stranguary is in almost every instance associated with constitutional disease. It is liable to occur at any period of life, sometimes attending the period of teething in children, and it is very common in old age. The application of a fly blister to any part of the body, will occasion stranguary in some: and the same effects are sometimes produced by the internal use of turpentine.

Gout, gravel, and piles, are often attended with difficulty and pain in voiding urine. The intemperate use of spirituous liquors; venereal excesses; exposure to cold and dampness, or whatever else tends to derange the general health, may occasion stranguary in persons predisposed to it, "Nervous and hysterical females are liable to extremely violent pains in the neck of the bladder and urethra, and which are generally most intensely felt immediately after discharging urine." Stranguary in the old and feeble, is sometimes occasioned by an enlargement of the prostrate gland, but more commonly it arises from other causes, as disease of the coats of the bladder, irritating acids in the urine, and gravel.

Treatment.—Infants may be relieved of stranguary by the warm hip bath, or fomentations to the belly, together with the use of injections to the bowels, composed of half a teaspoonful of the tincture of lobelia, or the same quantity of green lobelia in composition tea. If the general health be much deranged, an emetic, or full course must be given, followed by the use of flaxseed, scabious, parsley, or watermelon-seed tea, and occasionally by small doses of the tincture of lobelia.

When stranguary is occasioned by a *blister*, this of course should be removed, and the patient take mucilaginous drinks, as elm, flaxseed tea, &c. If this does not remove the difficulty, recourse should be had to fomentations and injections. When it arises from the use of turpentine, the same constitutional treatment above recommended, will be proper.

Associated with gout, the chief dependence must be on constitutional treatment, with a view to correct the acrid state of the urine, and to restore the general health. As a means of affording relief during severe attacks, the warm bath, vapour bath, or hot fomentations should be used, together with injections containing a portion of lobelia. The patient may experience relief by drinking freely of scabious tea.

When it arises from gravel, constitutional treatment will be also proper, for which an occasional course of medicine will prove the most effectual. When the urine is high-coloured, and deposites a

reddish or yellow sediment on standing, alkalies should also be used, such as sal æratus, bi-carbonate of soda, or a tea of hickory ashes.

Scabious tea, sweetened with honey, and drank freely, affords almost instant relief in some cases.

Harlæm oil is a favourite remedy with many for gravel, and difficulty of passing water. The dose for a child is from 4 to 6 drops, and for an adult, from 15 to 20 drops.

When stranguary is occasioned by irritation from piles, a strong decoction, made by steeping witch hazle, or sumac leaves in boiling water, should be administered by injection, and retained in the bowels for several hours, which will lessen irritation in the piles, and in this way the occurrence of stranguary may be prevented. The lobelia injections and hot fomentations may be found necessary to relieve the immediate symptoms of painful irritation.

When accompanied with hysterical symptoms, an emetic or a full course of medicine will be necessary. The same constitutional treatment that will cure hysteria, will also remove stranguary. When stranguary arises from prolapsus, or other displacement of the womb, the same constitutional treatment will be proper, more especially the enemas containing lobelia; the vapour bath, and hot fomentations. It sometimes happens, however, in displacement of the uterus, and more especially in its retroversion, that the introduction of a gum-elastic bougee into the bladder to draw off the urine, becomes necessary before the displacement of the uterus can be overcome.

Females affected with fluor albus, or whites, are subject to severe burning pain on voiding urine, in consequence of an extremely irritable state of the urethra. Injections of a strong decoction, prepared by steeping witch hazle or sumac leaves in boiling water, adding a small portion of capsicum, should be used two or three times a day, with a female syringe, beside resorting to the usual means for restoring the general health, by which the parts will become strengthened.

When attendant upon old age, or occurring in constitutions exhausted by debauchery and intemperance, a permanent cure of stranguary is not to be anticipated: a relief of the symptoms will be all that can in general be effected by any course of treatment whatever.

Injections into the Bladder.—Warm water injected into the bladder with an ordinary syringe, will immediately relieve stranguary in many cases, more especially when the urine is scanty, high-coloured, and acrid.

Honey taken in teaspoonful doses, three or four times a day, has been used with signal benefit in some cases of stranguary. It may

be employed to sweeten medicine when it is found to agree with the stomach.

SECTION VI.

INCONTINENCE OF URINE.

(*Involuntary Flow of Urine.*)

Incontinence of Urine, though not in general attended with pain, is nevertheless, in many instances, a very troublesome complaint. It prevails most during childhood, and in old age.

Inability to retain the urine, with children, is commonly owing to constitutional weakness in the urinary organs. Sometimes it arises from an acrid state of the urine ; and occasionally it is caused by gravel. Weakness of the urinary organs may be induced by frequently having wet and cold feet.

The aged and feeble are especially liable to incontinence of urine, from weakness or paralysis of the sphincter muscle of the bladder, which is designed to retain the urine at the command of the will. In some instances the action of this muscle is completely lost, and the urine is continually passing off by drops as fast as it enters the bladder from the kidneys. This complaint is frequently associated with palsy and gout. Involuntary discharges of urine often take place in protracted fevers, where patients are extremely low, and observation proves it to be an unfavourable symptom. In fine, the same causes that produce retention of urine in one, may occasion stranguary in another, and in another an inability to retain the urine. Thus gravel, or stone in the bladder, which frequently occasions a stoppage of urine, will in other instances cause the urine to pass off involuntarily.

Treatment.—Incontinence of urine in children, is in most instances removed by the natural increase of constitutional strength. When the general health is impaired, constitutional treatment will be required, such as, an emetic to cleanse the stomach, and if the stools exhibit an unhealthy appearance, injections may be used to advantage, not only in correcting the bowels, but also to add strength to the urinary organs. The injections are to be prepared in the ordinary form. A strong tea made of the sumac bark, leaves, or berries, or of the aspen poplar bark, will be beneficial in strengthening the urinary organs, either in the young or old. For an adult, a teacup, two-thirds full, and for a child, a wineglassful of the tea may be taken two or three times a day. If the urine be high-colour-

ed, and deposites a sediment on standing, alkalies must also be used, such as bi-carbonate of soda, sal æratus, a tea of hickory ashes, or lime water.

A cold shower bath in the morning; friction to the surface with a salted towel, nourishing diet, exercise in the open air, and whatever else tends to invigorate the system, will also strengthen the urinary organs.

Children often evacuate the urine involuntarily at night during sleep; and in some instances this habit continues even to adult age. Voluntary discharge of urine frequently takes place under the influence of a dream. "Incontinence of urine," says Mr. Charles Bell, "never takes place but when the boy is asleep upon his back; and the cure is a very simple one. He is to accustom himself to sleep upon his face or side; the urine is not passed, nor is he excited to dream of making urine, while he keeps this posture. The circumstance is unaccountable, until we reflect upon this master-spring of the neck of the bladder—*the sensible spot, a little behind and below the orifice of the bladder*. When a person lies upon his belly, the urine gravitates towards the fundes; but when he lies upon his back, it presses upon this sensible spot, and distends that part of the bladder which is towards the rectum."

Long continued inability to retain the urine, more especially when associated with old age, is in general an incurable complaint. Benefit may be obtained, however, by the use of such remedies as a strong tea of sumac, aspen poplar, vegetable balsams, spirits of turpentine, and gum myrrh. Equal parts of tincture of myrrh and balsam fir, shaken together, will be found serviceable in many cases.

SECTION VII.

SUPPRESSION OF URINE.

(*The Kidneys ceasing to form Urine.*)

Suppression is to be distinguished from *retention* of urine. In the former, the kidneys cease to select the urine from the blood, consequently none is formed; whereas in *retention, the urine* is formed, but the passage by which it escapes from the bladder is obstructed. The chief danger attending retention of urine is over-distention of the bladder; but when the urine is not formed in consequence of a loss of action in the kidneys, the suppression is of serious consequence if long continued.

The loss of action in the kidneys is a consequence of great de-

rangement in the system, and seldom occurs except in the last stage of disease, when the living powers are fast sinking, and the patient beyond the reach of recovery. Suppression of urine, however, does occasionally take place under circumstances different from those above mentioned, that is: it sometimes occurs when the living powers are not so far exhausted but that the patient may recover by energetic treatment.

Symptoms.—The suppression may be either partial or complete, and the only certain method of determining the suppression is by introducing a catheter into the bladder.

Suppression of urine cannot continue long without producing serious consequences. "There is fever, thirst, a taste similar to that of urine in the mouth, and a smell of urine in the perspiration; to these, nausea, vomiting, sometimes of fluids, having a urinous odour, and hiccup succeed; and to these, oppressed breathing, delirium, and eventually stupor and convulsions.

Treatment.—Suppression of urine, except when it occurs in the latter stages of disease, calls for prompt and energetic treatment, with a view to excite action in the kidneys. When the suppression takes place with a group of other symptoms, denoting a fatal termination, as in the last stage of a disease, all remedial measures must of necessity prove useless. When there is a probability of a recovery being effected, stimulating injections should be administered to the bowels, and a tablespoonful of the third preparation of lobelia may be used in each injection, and repeated frequently.

Steaming is of the greatest importance, not only to throw the *urea* out of the blood by perspiration, but it sustains and augments the vitality of the blood by the heat and electricity imparted to it, and by quickening its circulation through the lungs.

Emetics will also aid in restoring action in the kidneys.

Hot stimulating poultices must be applied to the urinary region, or small of the back, and kept warm.

The patient should be kept in a perspiration,—this is very important.

Case.—A gentleman near Germantown, had been confined to his room nearly the whole of the winter, and having, as he supposed, suppression of urine, desired me to attend him. No urine had passed during seventy-four hours, and as there was no distention of the bladder, there was strong evidence of *suppression*. A thorough course of medicine was administered, and stimulating injections repeated frequently, together with the free use of stimu-

lating medicine. Not long after this treatment had been commenced, the kidneys resumed their functions, and the patient recovered rapidly: the means used for restoring action in the kidneys, had the effect also of removing the original disease, which had occasioned the suppression.

CHAPTER VIII.

DISEASE OF THE LIVER.

SECTION I.

ACUTE INFLAMMATION OF THE LIVER.

Acute inflammation of the liver does not occur frequently in temperate climates.

Causes.—Inflammation of the liver may be induced by blows or other injuries in the region of the liver; a sudden check to perspiration after violent fatiguing exercise; by gall stones, which are hardened secretions formed in the gall bladder, and found in the ducts; or it may be occasioned by the same influence that produces intermitting, or remitting fever.

The symptoms attending acute inflammation of the liver, are exceedingly diversified. Generally there is deep-seated pain in the right side about the false ribs; which is considerably aggravated by pressure. There is usually pain in the shoulder, and in some instances the pain is confined exclusively to that part. A deranged condition of the stomach and bowels always accompanies this disease, attended with more or less nausea and vomiting. The stools are generally light-coloured; and the urine yellow, or red.

Professor Mitchell mentions the case of a boy whose liver was wounded by the discharge of a gun, in which no pain was experienced except in the shoulder. In another instance, a negro who was run through the liver with a sword cane, complained of pain in the *shoulder*, and insisted strongly that the *wound* was there. Pain in the *shoulder* is not, however, a constant attendant of inflammation of the liver. Neither does costiveness always prevail,

for sometimes there are acrid secretions from the *liver*, which cause purging.

Many of the symptoms which attend acute inflammation of the liver, such as pain in the chest, short and hurried breathing, difficulty of lying down, fever, and a dry hard cough; so closely resemble the more prominent symptoms of inflammation of the lungs, that either of these complaints might very readily be mistaken for the other. A mistake, however, that would lead to no bad consequences, as the same general plan of treatment is required in each form of the disease, and in every other case of acute inflammation of internal parts, regardless of the name or precise location of the disease.

As the disease advances, the nervous system becomes affected; there is great anxiety, and sometimes delirium.

The *duration* of acute inflammation of the liver varies from four or five to ten or twelve days, when it terminates either in a restoration of the natural action of the organ, or in the formation of an abscess; or it may become a chronic disease.

There is always more or less danger attending acute inflammation of the liver. Much, however, will depend upon the promptness of treatment in the early stages of the disease.

Inflammation of the liver is frequently complicated with pleurisy, and inflammation of the lungs. The stomach and bowels are always disordered, and probably, in the majority of instances, the *stomach* is diseased antecedently to the *liver*.

Treatment.—Acute inflammation of the liver requires the same general course of treatment as pleurisy, or inflammation of the lungs. A full course of medicine must be given early in the disease, and repeated daily, if the symptoms be violent, until a crisis be effected. If the patient cannot sit up, a moist heat may be applied to the feet and around the body, in place of the vapour bath. The system should be relaxed by broken doses of lobelia. Injections are especially indicated, not only to relieve the bowels, but to equalize the circulation, and also to effect a relaxation of the system by lobelia administered in this way. In all sudden attacks of pain or inflammation, or fever, besides the regular course of medicine, the system must be continued under the influence of lobelia, sufficient to occasion relaxation of the capillary vessels, and thereby remove the obstructions to the general circulation, and obviate undue determination of blood to the part diseased.

Continued retching and vomiting, by operating as a sort of exercise to the liver, has a beneficial influence upon it, enabling it to replace the loss of morbid secretions by more healthy ones.

Stimulants must be given with a view to equalize the circulation; to maintian a determination to the surface; and to excite the

secretions of the mucous membrane of the stomach and bowels. More especially should pure stimulants be *freely* used in the advanced stage of the disease. Capsicum tea is the best stimulant; and if the skin be dry, portions of lobelia powder or tincture must be added.

Local Applications.—A warm poultice must be applied to the affected side, and a hot brick, or a bottle of hot water placed so as to keep the poultice warm; or cloths wrung out of hot water, and applied as hot as can be borne by the patient.

The Diet must be light, consisting chiefly of gruel, barley water, crust coffee, &c. In the more advanced period of the disease, when the strength is greatly exhausted, it will be necessary to give wine-whey and essence of beef.

Bitters may be used to restore digestion, after the tongue begins to clean, or the disease has formed a crisis.

The symptoms denoting the formation of an Abscess in the Liver, are—irregular chills or rigours; pain and sense of fulness in the region of the liver; and night sweats. When this group of symptoms is manifested after acute inflammation of the liver, of several days' continuance, it furnishes strong evidence that suppuration has taken place. The abscess may point to the *surface* and be discharged *externally;* or the pus may be discharged through the gall ducts into the *bowels;* or it may escape into the *cavity of the abdomen*, and occasion *fatal peritonitis*. Abscess of the liver has in some instances penetrated the *lungs*, and its contents been discharged by *coughing*.

An abscess having formed, the indications for the treatment are,—to support the strength of the patient by the use of pure stimulants and bitters, and by a nourishing diet. The articles of diet, however, must be such as are suited to the condition of the enfeebled digestive powers.

2. *Chronic Disease of the Liver.*—Although acute inflammation of the liver is of rare occurrence in our climate, yet no organ in the body, with the exception of the stomach, is more liable to chronic derangement of its functions, than the liver. A disordered stomach is in almost every instance, however, the original cause of disease in the liver. A deranged liver is almost always a torpid one. Dyspepsia is mostly attended with a deficiency in the secretions of bile, from a want of proper circulation of blood through the liver. Costiveness is in general the consequence of a want of bile, and the use of purgative medicines with a view to overcome a costive habit is worse than useless, as they aggravate and weaken the bowels,

without restoring the action of the liver. The intemperate use of alcoholic drinks is very apt to produce finally, torpor of the liver, and in some instances this organ becomes greatly enlarged, as a consequence of intemperate habits.

A disordered stomach lessens the nervous power which governs the function of the liver, and consequently the circulation of the blood through the liver is enfeebled, and the secretion of bile diminished; and if the cause that occasions the disorder in the liver be continued, as in habitual drunkenness, the liver may lose its power to perform its functions, at least for a time, even though the habits of the person may have become reformed. The continued use of active cathartics, more especially of mercurial preparations, are pernicious, not only to the stomach and bowels; but also to the liver. Close and intense study, confinement in illy-ventilated apartments, and exposure to cold and dampness, depressing passions, and excessive losses of blood, frequently occasion torpor of the liver. Derangement of the functions of the liver, however, are in most instances, but one link in a chain of disordered functions, from loss of vital power in the system.

Torpor of the *liver* is associated with acute disease, such as dysentery, cholera morbus, pleurisy, erysipelas, and autumnal fevers. When patients are bled largely during an acute disease, the excessive loss of blood may occasion torpor of the liver, continuing for years, accompanied with dyspeptic symptoms.

If the debilitating influence occasioning *torpor* of the *liver* be continued, the circulation will become more obstructed and feeble, and finally the organ may lose its power to secrete bile, occasioning inveterate dyspepsia, dropsy of the abdomen, or jaundice. Hence disease of the liver which at first is but a *link* in a *chain* of disordered functions, the seat of which is in the stomach, may finally be the *cause* of a *new train* of disordered action throughout the system, requiring a long course of treatment to effect a cure.

Symptoms attending chronic affections of the liver are extremely diversified. The most obvious symptom indicating obstruction to the flow of bile, is a yellowness of the skin and whites of the eyes. Sometimes there may be a low grade of inflammation in the liver, occasioning shooting pain in the side and shoulder, accompanied with a dry, harsh, contracted state of the skin; loss of appetite, bad taste in the mouth, extreme restlessness at night; and dizziness of the head. In such cases digestion is always impaired, there is flatulency and distress after meals, attended with heartburn, and constipation of the bowels. In some cases the patient will be affected with occasional diarrhœa, the stools presenting various appearances, sometimes clay-coloured; in other instances bilious; or they may be slimy and hard, or have a green appearance. Sometimes the liver becomes enormously distended and hard

filling at least half the cavity of the abdomen, and its margins are distinctly felt by pressing the hand on the abdomen.

Treatment.—Depending for most part upon a disordered stomach, the indications for the cure of disease of the liver are, to correct the disordered condition of the stomach and bowels, and to warm and invigorate the system by the use of stimulants and tonics, and by a well regulated diet.

Torpor of the liver may be more *readily* overcome in most instances by a course of medicine, than by any other means. If the disease become seated, it will be necessary in most cases to repeat the *courses of medicine*, and during the intervals between them, to use bitters freely; and if the bowels be costive, take three or four of the compound lobelia pills after each meal and also at bed-time.

Acids.—Especial relief may sometimes be obtained by the use of *pepper sauce*, taken in moderate doses three or four times a day, and more especially at meals. This preparation is most likely to prove serviceable when there is a desire felt for something of the kind.

The Vapour Bath by its influence in restoring the functions of the skin, may be employed with benefit in diseases of the liver or of any other internal organ. *Thomsonians*, therefore, in applying remedies, do not require a particular investigation to ascertain the precise location of the disease, nor to know what name nosologists would very learnedly apply to it; for the same general treatment will be applicable to every other form of disease. Thus the vapour bath which proves beneficial in curing disease of the liver, will be equally applicable to disease of the kidneys, bladder, lungs, pleura, bowels and head, and in fine it may be administered in any disease with safety, though it may not always prove especially beneficial.

Emetics.—The most efficient means to remove obstructions of the liver, in general, are the application of the vapour bath, followed by a prompt emetic. Cases of very stubborn character have been cured by continued vomiting from sea-sickness, the patient being in a relaxed condition, similar to that produced by the influence of lobelia upon the system. In cases of long standing, however, and when the disease is associated with old age or an exhausted constitution, the frequent repetition of a course of medicine might be harassing to the patient, and fail to effect a cure. A change of organization in the liver having taken place, as it sometimes happens when the disease has been long-continued, a palliation of the symptoms, is all that can be reasonably looked for from medicine,—as a radical cure, under such circumstances, is rarely to be accomplished.

The functions of the liver may be influenced to a greater or less degree by means of medicine administered to the bowels. Hence injections will be useful, not only to relieve the bowels, but when properly prepared exert a beneficial influence on the liver. Lobelia administered in this way, and retained, diffuses its influence throughout the whole system, and at the same time that it occasions relaxation of the organs, it tends to restore their proper functions. Again, injections are useful to cleanse the bowels of morbid secretions, which they are more or less coated with, in nearly, if not in all cases of seated disease. The morbid secretions alluded to, usually pass off in the form of flakes, and sometimes in pieces, from a few inches to a foot, or even a yard in length, having somewhat the appearance of an intestine. Patients not aware of the frequency of its occurrence, sometimes become alarmed at the passage of this kind of substance from the bowels. There are, however, few if any recoveries from seated disease, in which there has not been more or less of this morbid secretion passed from the bowels.

Foot Bath.—The following mode of preparing and using a foot bath, is recommended by many practitioners who have tried it, namely:—"Into a glass vessel, capable of holding a pint or more of fluid, put eight ounces of water, and then pour in four ounces of nitric, and the same quantity of muriatic acid. One ounce of this mixture to a gallon of water will form a bath of medium strength. The feet and legs of the patient are to be immersed in this bath at the temperature of about 96°, and kept there twenty minutes or half an hour, just before going to bed. This should be done every night, and the same bath will remain good for five or six nights." The utility of the warm foot bath cannot be doubted, and as there can no harm arise from the use of the acids, they should be added as above directed.

If the tongue be coated with fur, a strong decoction of the bayberry or sumac, with the addition of a teaspoonful of composition powder, or half the quantity of capsicum, may be taken once or twice a day.

The use of bitters is indicated in chronic affections of the liver. If there be any cases in which the bitter root (apocynum androsœmifolium) may be used with advantage, it is in chronic affections of the liver. It must be given in pills, or the powder taken in lukewarm water, but not in sufficient quantity to produce purging.

In every form of seated disease, where medicine is required for many weeks or months in succession, an occasional change of remedies will be proper.

Dandelion.—The dandelion, in the form of an extract or decoction, has been used with especial advantage in chronic diseases of the liver.

Change of habits.—I have observed symptoms indicating extreme torpor of the liver, brought on by retirement from active business. In such cases the patients should resume their former active habits.

A sea voyage has often cured diseases of the liver of long standing.

SECTION II.

JAUNDICE.

A DISEASED condition of the system is sometimes attended with obstruction of the natural passage of the bile, occasioning a yellow tinge in the skin and whites of the eyes, which is termed *jaundice.*

The digestive powers are always more or less weakened, and general coldness and torpor of the system prevails before the symptoms of jaundice appear. The suspension of the flow of bile may arise either from obstructions in the gall ducts; coldness and torpor of the liver; or from deficiency of nervous power. A jaundiced appearance of the skin is very commonly observed in low forms of fever, arising from suppression of bile; thus yellow fever, as it is termed, receives its name from the yellow colour of the skin.

"When people have what is called jaundice," says Dr. Thomson, "it is the prevailing opinion that they have too much bile, and it is said they are bilious. This is a mistaken notion, for there is no such thing as there being too much gall: it would be more correct to say there was not enough. The difficulty is caused by the stomach being cold and foul, so that the food is not properly digested; and the bile not being appropriated to its natural use, is diffused through the pores of the skin, which becomes of a yellow colour."

"In all cases of jaundice, cerebral symptoms demand attention, for usually in consequence of cerebral affections this disease proves fatal. The cause of this complication is suppression of the biliary secretions, the elements of which, being retained in the blood, act like a poison on the system, especially on the brain. In like manner, urea, if retained in the blood, proves deleterious. The bile must be elleminated from the blood, which is effected slowly, and by a process of nature, unless nature by the only process of art yet known, is assisted by full botanic courses of medicine."—*Dr. A. C. Logan.*

Symptoms.—The most prominent symptoms in jaundice, are yellowness of the skin and whites of the eyes, loss of appetite, bad taste in the mouth, costive bowels, high-coloured urine, enfeebled mental powers, and a dry state of the skin. The pulse is frequently unaffected: it is sometimes slower, and at other times quicker than natural. Yellowness of vision is frequently one of the first symptoms indicating the approach of jaundice, which may arise from the humours of the eye becoming tinted with the yellow colouring matter of the bile, and transmitting yellow rays of light. The patient is generally either restless and unable to sleep, or continues in a state of somnolency or stupor.

The colour, in jaundice, may vary from a light yellow to that of a deep green, or almost black.

Location.—The jaundiced appearance of the skin is sometimes confined to the face and neck, in other instances it is diffused over the whole surface of the body and limbs.

The Approach of Jaundice.—Generally the disease comes on in a gradual manner, associated with symptoms of indigestion; "a general feeling of languor; disinclination to bodily and mental exertion; an irritable and dejected temper; weakness of appetite; constipation; acid eructations; slow and painful digestion; flatulent pains in the bowels; a slight feeling of fulness and tension in the epigastrium," (pit of the stomach); restlessness at night; turbid urine, usually depositing a copious pitchy sediment; slow and languid pulse; more or less nausea; and frequent transient chills, alternating with flushes of heat." After these symptoms have continued for a few days, a disagreeable itching over the whole body takes place; the taste becomes bitter; the stools whitish or clay coloured; the urine of a deep saffron hue; and finally the whites of the eyes, and the skin about the lips, neck, and forehead, assume a yellow colour, which speedily extends itself until the whole surface acquires a uniformly yellow hue.

Sometimes the disease comes on suddenly, with severe pain and distress at the pit of the stomach, attended with frequent vomiting, and an entire disgust for food.

The duration of an attack of jaundice is extremely varied. In some instances it passes away in the course of a few days, whilst in others, it will continue for months, and occasionally the disease assumes the chronic form, in consequence of permanent derangement of the digestive functions, and continues for years accompanied with symptoms of dyspepsia.

Treatment.—Jaundice being merely a symptom, arising from previous disease, it is to be overcome or removed by correcting the derangement of the general health.

The symptoms being violent, the treatment must be thorough and early applied. A course of medicine should be given, and repeated every day or every other day, until the symptoms become more favourable. Besides a course of medicine, the compound lobelia pills may be given, together with an occasional dose of capsicum in composition. Although courses of medicine constitute the most effectual means for the cure of jaundice in general, there are cases of it, and more especially those of long standing, and where the liver has become changed in its structure (as it is sometimes found to be in this disease) where courses of medicine, especially the emetics, do but little good, except when the patient is distressed with undigested food in the stomach, severe colic, &c. The vapour bath may be applied to the weakest patients, provided they are in a lying position. The steaming may be continued from half an hour to an hour or more.

Tonics.—The most powerful kinds of bitters are required in jaundice. In sudden and violent attacks, the bitters may be employed after the symptoms abate, but when the disease comes on in a gradual manner, they may be employed from the first, in combination with stimulants. A tablespoonful of the expressed juice of green wormwood, added to an equal quantity of whiskey, taken three times a day before meals, has been used by some with especial benefit.

Dr. Thomson in treating of jaundice, says: "I have attended many cases of this kind, and never had any difficulty in effecting a cure. My method is to give No. 2, or the composition powders, to raise the internal heat, and No. 1 to cleanse the stomach, and promote perspiration; then give the bitters, No. 4, to regulate the bile and restore the digestive powers. If the complaint has been of long standing, and the system is much disordered, they must be carried through a regular course of medicine; and repeat it as occasion may require, and at the same time give the bitters two or three times a day, until the appetite is good and digestion restored."

Sometimes jaundice is occasioned by gall stones being lodged in the gall ducts, attended with violent paroxysms of pain in the right side, near the pit of the stomach, and continued straining efforts to vomit, the stomach at the same time forcibly rejecting any thing that is swallowed. In a case of this kind, the vapour bath must be applied; and the system placed in a state of relaxation by lobelia administered by injections; together with full and frequent doses of the third preparation of lobelia, until the symptoms are relieved. Gall-stones have been removed in many instances, by the operation of emetics.

Straining efforts to vomit, when the system is warmed by the va-

pour bath, or by the application of hot bricks wrapped in damp cloths, around the patient, and relaxed by the influence of lobelia, will form the surest means of removing obstructions, either in the gall ducts, or in the liver.

A warm stimulating poultice, applied to the pit of the stomach may relieve pain in the liver.

The warm foot bath, prepared in the manner described in the treatment for chronic disease of the liver, has been used with marked advantage in jaundice.

Harlæm oil has been used with good success in some cases of jaundice.

Bitters, such as barberry, golden seal, and Thomson's No. 4, put into hard cider, will be found good for the patient in many instances, more especially when there is a desire for cider.

Celandine, agrimony, blood root, hempseed boiled in milk, besides many other articles and compounds, have been recommended as specific remedies for jaundice, not one of which, however, can be relied upon. Although patients may recover from jaundice, under the use of celandine, hempseed, or some other of the reputed specifics, there is no evidence that the disorder would not have been removed sooner under Thomsonian treatment. I have known jaundice cured by Thomsonian treatment after various other remedies and modes of treatment had been tried without success; but I have yet to see the first case cured by other treatment, after the Thomsonian practice, judiciously applied, has failed.

Change of Air.—In seated disorders, a change of residence will frequently be attended with a decided improvement in the general health, even where medicines do little or no good.

Diet.—In jaundice the digestive powers are always weak, and therefore a strict attention to diet must be observed. In the commencement of the disease, and more especially if the symptoms be violent, the diet should be confined to the lightest kinds of food. In cases of long standing, it may be more nourishing, but it must be easy of digestion. As a general rule, in jaundice, butter, and all kinds of fat meats disagree with the stomach.

CHAPTER IX.

SECTION I.

APOPLEXY.

Symptoms.—A sudden suspension of consciousness; loss of the power of voluntary motion; stupor; heavy and laborious breathing; and a slow and full pulse, are the symptoms which characterize apoplexy. The symptoms attending apoplexy are necessarily modified by the degree of severity of the fit. It might be difficult, in some instances, for even experienced physicians to determine whether the disease should be called apoplexy or palsy. The name, however, is a matter of little consequence, inasmuch as it should have no influence in governing the treatment.

An attack of apoplexy occasionally comes on suddenly, without any precursory symptoms. More commonly it is preceded by giddiness, and a sense of weight and deep-seated pain in the head, ringing in the ears, and dimness of sight. These symptoms may occur a few hours, or they may continue for a week, or even for months previous to the attack, and occasionally they disappear without the occurrence of an apoplectic fit.

In some cases the attack comes on *suddenly*, the patient sinking at once into a profound stupor, from which he cannot be in any degree aroused—resembling a deep sleep—and each respiration attended with a puffing of the lips, and a frothy saliva blown out with a sputtering noise. These cases generally prove fatal in a few hours. In other cases, the patient may be seized with deep-seated pain in the head; sickness and vomiting; tremor of the limbs; dizziness; confusion of mind; and then gradually sinks into a state of stupor, from which he will partially recover, so as to converse, and be able to sit up, and probably walk about, but will still complain of pain and distress in the head, attended with giddiness and confusion of ideas.

Sometimes an attack of apoplexy comes on with palsy of one side, loss of speech, pain in some part of the head, and vertigo,—the patient retaining his consciousness. By degrees, in some instances, the brain becomes more oppressed and consciousness is gradually lost, until finally a deep stupor ensues.

Deep intoxication sometimes so nearly resembles apoplexy that

it may be difficult to distinguish between them. The breath, however, will detect intoxication, together with the *relaxed* state of the muscles, particularly those of the jaws, the reverse of which occurs in apoplexy.

In cases of *suspended animation and fainting*, the pulse and respiration is almost imperceptible, whereas, in apoplexy, the pulse is strong, and respiration full.

True Apoplexy always Dangerous.—When there is a total loss of consciousness, the respiration accompanied with deep snoring, a sputtering from the lips, loss of the power of swallowing, and the eyes fixed, the case may be considered as almost hopeless. Still we are informed that recoveries do take place, even after these symptoms have occurred.

Duration of the Apoplectic attack.—This varies from a few minutes to several days. In fatal cases the patient may live but two or three hours; or the case may not terminate under a week or more, from the commencement of the attack. In milder cases, the patient may recover perfectly in a short time; but more commonly, the patient remains weak, both mentally and physically, for months or even years.

Medical writers of extensive observation, among whom I may mention Hippocrates, consider the occurrence of fever, in the early stage of apoplexy, a favourable symptom. Where the pupil of the eye will contract by the near approach of a lighted candle; when there is a warm and gentle perspiration; the breathing free and regular, without noise or sputtering; together with the ability to swallow; and a copious discharge of urine is observed, hope may reasonably be entertained of a recovery.

Cause of Apoplexy.—The immediate cause of apoplexy, is stagnation of blood in the brain, suspending the function of innervation, or the generation of the nervous fluid, that governs the voluntary movements and produces consciousness.

Among the remote causes of apoplexy are advanced age; intemperance in eating and drinking; the long-continued use of active cathartics; and the habit of being bled frequently. The professor of Materia Medica in Jefferson College, in the winter of '44, told his class that he believed many people had died of apoplexy, occasioned by frequent bleedings, as formerly was the practice with the disciples of Rush, of bleeding in almost all cases of sickness.

Exposure to extreme cold, by exhausting the heat of the body, and causing the blood to recede from the surface and form internal congestion, is capable of producing apoplexy.

Severely protracted chills have been observed to terminate in apoplexy.

Positions of the body which favour a flow of blood to the head or impede its return to the heart, stooping with the head low, and lifting great weights, have been known to bring on a fit of apoplexy. It is only, however, where the predisposition to apoplexy exists, that it is liable to be brought on by such causes.

Among the occasional causes of apoplexy may be mentioned, *excessive evacuations*. The celebrated Boerhaave cites a case of apoplexy, apparently produced by excessive bleeding from the nose. Diabetes and cholera sometimes terminate fatally with symptoms of apoplexy. Excessive loss of blood is frequently followed by an extraordinary determination of blood to the brain. Experiments which have frequently been tried on animals, by abstracting large quantities of blood, and finally by bleeding them to death, go to prove, as has been observed on dissection, that *dropsy*, together with an *engorged* state of the blood-vessels of the brain and spinal marrow, *are a general consequence of excessive losses of blood.*

Treatment.—Such means and remedies are indicated in the treatment of apoplexy, as are best adapted to equalize the circulation of the blood throughout the system, and restore the functions of the brain, which are always either impaired or suspended in this disease.

Emetics.—The most important indication for the cure of apoplexy, and also for the preventing of an attack, is the evacuation of the foul contents of the stomach by emetics.

Injections.—These are of the first importance in the treatment of apoplexy. The third preparation of lobelia should be employed, or some other combination of lobelia;—for instance, the lobelia powder and No 6. One, two, or three tablespoonsful of the third preparation of lobelia may be administered at a time, in half a pint of lukewarm water, composition, or bayberry tea. This must be frequently repeated, with a view to attract the circulation from the head, and thus lessen the pressure of blood upon the brain, and to arouse the nervous energy of the system to carry on the circulation more equally, and with a more healthy activity.

If a patient have an attack of apoplexy within a few hours after a hearty meal, free vomiting will be imperatively demanded. The *third* preparation of lobelia must be poured into the mouth, and will be much more likely to be swallowed than a preparation of lobelia less stimulating. The impression of a powerful stimulant in the throat will excite the act of swallowing, and the medicine will be taken into the stomach, when the lobelia powder in lukewarm water, or composition tea would fail to excite the act of swallowing, whilst the patient is unconscious. When the functions of the brain are suspended, as they are in apoplexy, large

doses of medicine will be required in order to effect vomiting; or as an efficient aid to excite vomiting, the lobelia powder may be administered by injection in lukewarm water and retained. A tablespoonful of the powder may be used in the injection, which must be repeated promptly if necessary.

No unfavourable consequences will arise from vomiting in apoplexy. It is not so much a determination of blood to the brain that occasions apoplexy, as it is stagnation of blood in the capillary vessels of the brain. To restore circulation, there are no means upon which we can place so much confidence as emetics.

"A robust man," says Dr. Eberle, "about fifty years of age, fell down in a fit of apoplexy about an hour after taking a full meal of animal food, together with several glasses of brandy and water. The coma was profound, and the respiration stertorous and sputtering. He was immediately bled to the extent of about forty-eight ounces, but although the pulse was considerably reduced, no perceptible improvement ensued. Twenty grains of the sulphate of zinc were with difficulty introduced into the stomach, and free vomiting ensued in about ten minutes after. Almost immediately after the contents of the stomach were thrown off, he became better." The patient recovered. The sulphate of zinc, being an active poison, would have proved detrimental, had it not been speedily thrown off. On account of the danger attending the administration of active poisonous emetics, most medical writers recommend milder articles,—camomile tea, ammonia in water, or mustard in warm water. But the sensibility of the stomach is generally too dormant to be acted upon by these *milder* remedies. The liquid of the third preparation of lobelia is the most effectual emetic. Apoplexy, however, is a disease which frequently baffles all remedial means.

Favourable Symptoms.—When the stupor becomes less profound, with some degree of awakened sensibility; the breathing regular and not stertorous, and no sputtering from the lips; together with a general warm perspiration, hope may be entertained of a favourable termination of the disease.

The compound Lobelia pills may be given in all cases as a general medicine, between courses of medicine, and during the patients recovery.

If the tongue be thickly coated, a teacup of strong bayberry or sumac tea, with an even teaspoonful of cayenne should be given two or three times a day.

A mixture of salt, vinegar and pepper when the patient has an inclination for acids, will be proper to be given, occasionally.

Bitter tonics are to be given when the tongue is cleaning, and the patient clear of fever.

External applications.—Besides the steam-bath, warm applications to the feet and legs; frequently rubbing the skin with the warm hand and the application of powerful stimulants to the surface are of considerable importance.

Preventive Measures.—When symptoms arise which denote the approach of apoplexy, such as headach and giddiness, dimness of sight, numbness of the extremities, drowsiness, faltering of the tongue, night-mare and stupor, *a course of medicine* should be given as the most efficacious means of preventing an attack.

SECTION II.

PARALYSIS.—PALSY.

Symptoms.—These are a loss of the power of *voluntary* motion, sometimes of feeling, in one half or some portion of the body, the patient not losing his consciousness.

In some instances there is loss of the power of motion, but without loss of feeling in the parts. In other cases sensibility and the power of motion are both lost. This is termed *numb palsy.*

In general the paralyzed parts are colder than other parts of the body; they become soft and flaccid, sometimes puffy and dropsical. Very often patients complain of great coldness in the affected parts. Sometimes peculiar tingling, or creeping sensations are felt in the afflicted parts, as if small insects were creeping over them."

When palsy arises from disease of the brain, it is generally attended with an impairment of the mental powers—amounting in some instances, to complete imbecility. The memory especially, is apt to suffer in this affection; and sometimes in a very singular manner." Thus some patients will lose the power of recollecting certain words, or names, sometimes even their own names, the memory being good in relation to other things."—" The natural temperament and disposition also sometimes suffer a total change from a stroke of palsy. Individuals of amiable and placid dispositions have become sullen, peevish and irrascible; and persons of an irritable and passionate temperament, have been rendered mild and simpering by a paralytic seizure."

Varieties of Palsy.—Paralysis of the whole of one side of the body is called *Hemiplegia.*

When both legs and the hips are palsied, it is termed *Paraplegia.*

When a single limb, or a particular part of the body is paralyzed, it constitutes the *Paralysis Partiales* of authors.

1. *Hemiplegia—Palsy of one side.*—Palsy of one side of the body is more observed than any other form. "This disease is very closely allied to apoplexy," the latter being in general a more severe form of disease. An attack of apoplexy is very often either preceded or followed by palsy.

Generally a stroke of palsy is preceded by symptoms of constitutional disturbance,—loss of appetite, costive bowels, distress or extreme insensibility of the stomach, giddiness and pain in the head, continual drowsiness, more or less impairment of speech, confusion of mind, and loss of memory.

Sometimes patients recover from a stroke of palsy in a few days after the attack; occasionally the disease terminates fatally, but most commonly the patient recovers gradually, until he is able to move about; continuing in this state in some instances many years without further improvement. Sometimes the recovery is complete.

Paraplegia—Palsy of the lower half of the body.—This form of palsy usually comes on in a gradual manner. The patient at first experiences numbness in the legs, succeeded by more or less difficulty in walking: his gait is awkward, and he requires a cane to assist in balancing his body. The bladder becomes more or less paralyzed, the urine being voided in a small weak stream, and at length passes off involuntarily. The bowels are generally constipated; but when the sphincter muscle of the anus becomes paralyzed, the fœces are evacuated without the consent of the will. In some cases the palsy is complete, the patient being unable to walk, or even to support himself in a sitting posture. In other instances the patient retains some degree of power over the motions of his legs, so that with the assistance of a cane or crutches, he is able to move about.

In persons past the age of forty, this form of palsy is generally occasioned by diseases of the brain. In children, the paralysis is in most instances caused by injuries of the spine.

2. *Partial Palsy.*—Sensibility and voluntary motion depend upon a nervous fluid, which is generated at the great centres of the nervous system, the brain and spinal marrow, and is conducted from these centres to every part of the system, through the medium of the nerves, which act as conducting wires to the nervous fluid. There are nerves of motion, and there are nerves of sensation. If a nerve of motion be cut, the part to which it is distributed will become paralyzed. And if a nerve of sensation be destroyed or injured so that it is incapable of conducting the nervous fluid, the part to which it leads will lose the power of feeling. If a portion of the brain or spinal marrow lose the power to generate nervous

fluid, that part of the body will become affected whose nerves arise from that part. Thus one side of the body having lost the power of feeling, we know that the disease is seated in that portion of the spinal marrow in which its nerves of sensation originate. If that portion of the spinal marrow from which the nerves of motion arise, is diseased, the parts will become paralyzed to which they lead. And if both the anterior and posterior columns of one half the spinal marrow lose their functions, that side of the body will be affected with loss both of motion and feeling.

In partial palsy, when a single muscle or small portion of the body is paralyzed, it is generally owing to disease in the nerve which is designed to distribute nervous power to the part. Paralysis of one side of the face alone, is sometimes occasioned by injury of the nerves leading to the part affected.

Of the Causes of Palsy.—A loss of power in the stomach is frequently the original cause of palsy, more especially when the disease attacks one side of the body. Although the immediate cause of paralysis is a loss of function in some portion of the brain or spinal marrow, still the original cause in most instances, is seated in the stomach. The functions of the brain and spinal marrow, as well as those of every other organ in the body, are to a greater or less degree influenced and governed by the state and condition of the stomach. Thus a person advanced in years, and predisposed to palsy from a weakened condition of some portion of the brain or spinal marrow, will be liable to an attack of it from prostration of the powers of the stomach. Both *apoplexy* and *palsy* are frequently brought on by undigested food in the stomach, long-continued exposure to severe cold or to dampness, the intemperate use of spirituous liquors, loss of rest, over-exertion, grief, fear, and by other depressing influences.

"Among the exciting causes of *partial paralysis*, the poisonous influence of lead is the most remarkable. The tendency of this article, to produce paralysis of the fore-arm and wrists, is peculiarly strong, as is evident from the frequent occurrence of palsy in persons who work in lead mines, plumber's shops, and in manufactories of white lead."

Treatment of Palsy in General.—In the early stage of palsy, a vigorous course of treatment is demanded, with a view to restore the lost function of that portion of the brain or spinal marrow, the *immediate* cause of the disease. Whether the loss of nervous power be occasioned by pressure of blood upon the parts, or from loss of power through mere debility, or even should it depend upon disease originally seated in the brain, a *course of medicine* will be especially indicated, besides the continued use of such remedies and means as will prove most successful in equalizing the circulation, and restoring the function of the stomach and bowels.

The Course of Medicine should be commenced with an injection. In most instances the bowels are extremely insensible, requiring the injections to contain strong stimulants, in order to produce the desired effect. A tablespoonful of the third preparation of lobelia, in half a pint of bayberry tea, forms a suitable injection in palsy, though in some instances double or treble the above quantity will be required in order to make a sensible impression upon the bowels.

When the patient is unable to sit up, the vapour bath will of course be applied in bed. It is always better to steam the patient on a couch or mattress, and thus avoid dampening the bed upon which he usually lies. Patients upon a couch or cot-bed will bear the continued application of the vapour for several hours in succession; the body to be washed over frequently with whiskey, vinegar, or simple cold water during the steaming.

When the patient is so situated as to be able to bear the steam a considerable length of time, an emetic should be given during the process of steaming. The best form of an emetic is the liquid of the third preparation of lobelia, adding a portion of brown lobelia powder, and given in a strong tea of the bayberry or sumac. I have observed more benefit from emetics than from any other means. To assist the operation of the emetic, and to bring the system more completely under the influence of lobelia, it will be highly important to administer an injection of lobelia powder, in lukewarm water. The course of medicine proves most effectual when the patient becomes very sick, and the system is fully relaxed under the operation.

The Compound Lobelia Pills, may be used with benefit. I have a case of palsy now under treatment, and the patient has so far recovered as to be able to walk. The use of the above pills, together with an occasional *emetic* and the *steam bath*, followed by a *shower bath* two or three times a week has constituted the principal treatment in this case. She is now using bitters, and the bowels are relieved by injections.

Palsy, however, is a disease from which patients recover very slowly, and therefore, in deeply seated cases, it will not be necessary to pursue a very thorough course of treatment, except during the earlier stages of the complaint; or when the symptoms assume a more unfavourable aspect. Thus after administering a few courses of medicine, repeating them every day, or every few days, the *course of medicine* may be omitted, except occasionally, say at intervals of one, two, or three weeks, as the circumstances of the case may seem to require.

When there is oppression at the pit of the stomach, fever, foul tongue, or general distress, an emetic should be given.

Capsicum is the best remedy to warm the stomach and bowels

and restore the secretions of the mucous membrane. It may be taken in the form of pills, powder, or decoction. The compound lobelia pills contain a large portion of pepper, and answer as a substitute for other preparations of pepper. In all cases of palsy, the mucous membrane of the stomach and bowels is more or less coated with morbid secretions, which must be removed, or otherwise the disease will continue. When the tongue begins to clean around the edges, or the coating which covers its surface begins to soften, then the capsicum should be taken in bayberry tea. The pepper stimulates the secretions, sustains the circulation, and causes a determination to the surface; the bayberry combining with foul secretions of the stomach and bowels, causes them to become detached, leaving the mucous surface clean.

A mixture of *salt, vinegar and pepper*, is grateful to the stomach in many cases, and is usually found beneficial where the patient craves acid. The *pepper sauce*, or simple *salt and vinegar*, may be employed in many cases of disease, with signal benefit to the patient.

In palsy the bowels are generally costive, requiring an occasional injection. In palsy of the lower half of the body, the most powerfully stimulating injections will be required, in order to make a sufficient impression upon the bowels.

Mustard Seed.—A tablespoonful of white mustard seed taken two or three times a day, will stimulate the bowels to action, and is well suited to cases of palsy.

Mustard Seed and Horse-Raddish were favourite remedies with the late Dr. Barton, of Philadelphia, who used them with much advantage in the Pennsylvania Hospital in cases of palsy.

Tonics.—In an advanced period of the disease, or when the system is in a relaxed and feeble condition, strong tonics will be required; such as Peruvian bark, quinine, Thomson's No. 4 bitters, wormwood, or quassia. Prickly ash bark or berries may be added to the bitters with advantage.

External Remedies.—Besides the vapour and shower baths there should be a continued application of warmth to the affected side; the skin occasionally to be bathed with pepper sauce, third preparation of lobelia, stimulating liniment, or No. 6. Frictions of the surface with a flesh brush or salted towel, several times a day will be of advantage. Occasionally a pepper poultice or mustard plaster should be applied to the nape of the neck, extending eight or ten inches down the spine. When mustard is applied, it should not remain on so long as to produce a blister.

Paraplegia.—(*Palsy of the lower extremities,*) requires the same

constitutional treatment as above described, adapting the remedies, however, to the circumstances of the case.

The bladder is frequently paralyzed in this form of palsy, sometimes requiring the use of a catheter, to prevent an over-distention of the bladder. The bowels require stimulating injections, and the free internal use of compound lobelia pills, and capsicum, or pepper sauce.

The Hip Vapour Bath is adapted to this form of palsy. The parts, however, being in some instances devoid of feeling, are liable to be scalded by the steam unless particular attention is paid to regulate its temperature. Especial care will also be necessary to prevent the feet from being burned by hot bricks when they are placed near them.

Children are sometimes affected from birth with unusual debility, and want of power over the legs. Such cases require the cold salt water bath, or shower bath, frictions of the surface with a salted towel, fresh air, wholesome food, stimulating applications to the skin, together with internal constitutional remedies when the general health is bad. If the digestion be feeble, or the bowels disordered, with a foul tongue and bad breath, an emetic must be given, and repeated when necessary.

Palsy of the lower half of the body, when of long standing, is often incurable. It is therefore important to institute a thorough course of treatment in the early stage of the disease, before it becomes immovably fixed. Palsy, however, sometimes arises from causes that cannot be removed, even though prompt remedial measures be early applied.

For Palsy of the Tongue the patient should keep some stimulant in the mouth, such as pepper, ginger, cloves, conserve of hollyhock, &c. In severe cases the third preparation of lobelia must be employed.

In Paralysis of the Optic Nerve, termed *amaurosis*, a course of medicine frequently repeated in the early stage of the disease, will prove the most efficient means of cure. This disease frequently originates in a disordered stomach. It is not every case of amaurosis, however, that can be cured even by the most prompt and persevering course of treatment.

Palsy of one side of the Face has been cured by emetics. A full course of medicine will be more effectual. If the paralysis arise from a destruction of the nerve, as when the nerve is cut, there is, of course, no cure for such a case.

Mercurial Tremor.—(Shaking Palsy.)—"This disease affects

workers in mercury,—chiefly those employed in silvering mirrors."

Symptoms of Shaking Palsy.—At first there is slight tremor in the limbs, and sometimes salivation; "afterwards convulsive agitation of the limbs whenever they are moved. The articulation becomes imperfect. The hands are so agitated, that a partly filled cup cannot be conveyed to the mouth without spilling the liquid. On attempting to walk, the limbs dance and perform irregular movements. Whilst sitting still, the patient may remain free from chorea; but on every exertion of the volition, and on every occasion of mental agitation, the irregular movements are renewed. The sleep is disturbed; the patient wakes alarmed by terrific dreams; nervousness and debility attend; and the bowels are constipated."

Treatment.—In the onset of the complaint, a removal from the influence of the cause; vapour baths, and an occasional course of medicine, together with the use of stimulants and tonics, and exercise in the open air, may succeed in effecting a cure, or at least prevent the disease from getting worse.

SECTION III.

EPILEPSY.

(*Convulsion Fits—Falling Sickness.*)

An attack of this disease is characterized by a loss of consciousness, and by a jerking or convulsive motion of the muscles. Sometimes the fit comes on suddenly, without any previous symptoms indicating its approach; at other times it is preceded by various symptoms of constitutional disorder, with giddiness, stupor, pain in the head, and confusion of mind. Some patients experience a sensation like that produced by a stream of cold vapour, commencing in the feet and gradually extending itself until it reaches the head, when the patient immediately becomes insensible. If the patient be standing or sitting when he is seized with a fit, he suddenly falls and is totally insensible, the eyeballs are distorted, the breathing greatly interrupted, the face swells, and *convulsions* ensue, which generally continue from five minutes to half an hour. In some cases the convulsive action of the muscles, particularly those of the face, are frightfully violent; the whole face is agitated; the eyeballs roll; the lips and eyelids are convulsed; the tongue

is often spasmodically thrust from the mouth, which with the grinding of the teeth, and foaming at the mouth, gives the countenance a horridly wild expression. Sometimes the teeth are firmly pressed together; at other times the jaws are widely and fixedly distended. The limbs of both sides of the body are equally convulsed in some cases, but more frequently the muscular spasms are stronger on one side; and occasionally one limb only is affected with spasm. "The heart palpitates rapidly; the pulse is usually contracted, irregular and frequent; and respiration oppressed, laborious, and in violent cases, sonorous. About the termination of the paroxysm, a considerable quantity of frothy saliva usually flows from the mouth; and in some cases the fœces and urine pass off involuntarily." Sometimes the convulsions stop suddenly, but more commonly they decline gradually. The breathing becomes more free, the countenance assumes a more natural aspect, and the patient falls into a profound sleep. The patient is languid and stupid, and when he awakes, he has no recollection of what has passed.

The character of an epileptic fit varies greatly in different cases. In some instances it passes off in a few seconds—in others it continues for hours. The paroxysm is most apt to be protracted in *children*.

Some patients are subject to convulsions at *night* only; others are liable to an attack at any period of the day. With some, the fits come on at regular intervals. Dr. Eberle mentions a case where the paroxysm returned regularly on the night of each full moon.

Sometimes there will be but one paroxysm. In other instances the patient will have them in continual succession during a period of many hours, sometimes passing from one into another, until he has had twenty, forty, or even sixty fits, in the course of twenty-four hours.

Causes.—Convulsions may be caused by disease seated exclusively in the brain or spinal marrow; or the epileptic paroxysm may be induced by a disordered condition of the stomach or bowels, the functions of the brain being thereby sympathetically deranged. Sudden fright has been known to bring on epilepsy. Excesssive loss of blood has frequently led to convulsions.

In children, convulsions are often occasioned by undigested food in the stomach, and from worms in the stomach or bowels.

In some families the children are peculiarly liable to convulsions during the period of teething.

Small-pox, scarlet fever, and measles are occasionally attended by convulsions, more especially just before the eruption appears; and also when the eruption leaves the surface for the internal organs, or as it is commonly expressed, when the disease strikes in. The use of laudanum predisposes children to epilepsy. Suppressed

menstruation, and diseases of the uterine organs are sometimes attended with convulsions.

Venereal excesses and abuses, and the intemperate use of alcoholic liquors are among the exciting causes of epilepsy.

A sudden check to the menstrual flow, from exposure of the feet to dampness, is liable to cause violent hysteric convulsions.

Distinguishing Symptoms between Epilepsy and Hysteric Convulsions.—In *epilepsy* there is a total loss of consciousness, whereas in hysteria some degree of sensibility remains.

2. The eyes are more distorted, and the face more suffused and livid in *epilepsy* than in *hysteric convulsions*.

3. In *epilepsy* there is usually foaming at the mouth, which is absent in *hysteria*.

4. In *hysteria* the paroxysm does not terminate in a deep sleep, as it does at the close of an *epileptic paroxysm*.

5. *Hysteric convulsions* are generally attended by involuntary paroxysms of laughing or crying, and a sensation of a ball in the throat, none of which accompany epilepsy. Epilepsy and hysteria may proceed from the same cause, the symptoms being of a more aggravated character in the former than in the latter.

Treatment.—An important indication in the treatment of epilepsy, and every species of convulsion is to overcome the spasmodic action of the muscles. The third preparation of lobelia is the remedy chiefly to be relied upon, this being the most efficient antispasmodic medicine in use. In many instances an attack of epilepsy may be prevented by the patient taking a tablespoonful or even a teaspoonful of the third preparation of lobelia, when the first symptoms of an approaching attack make their appearance. Many persons, however, have no warning of the approaching paroxysm, but fall suddenly into a state of insensibility. The third preparation of lobelia may be given during the convulsions, without any risk of strangling the patient, the stimulus of the medicine in the throat, sometimes exciting the action of swallowing, and thus the medicine will be easily taken into the stomach. When the third preparation is not at hand, the tincture or a simple tea of lobelia may be used.

Emetics.—An oppressed or otherwise disordered stomach, is a frequent cause of convulsions in children, demanding the use of emetics. If the convulsions be so strong as to prevent swallowing the medicine, it must be administered freely as soon as the paroxysm subsides, with a view to prevent a return of the convulsions. The third preparation of lobelia is the most efficient emetic. The lobelia, however, may be given in tincture, or the powder alone in lukewarm water.

Injections.—These when rightly prepared and administered, are almost as effectual in overcoming convulsions, as medicine taken into the stomach. They may be administered during the paroxysm, provided the convulsions do not prevent it.

In *Adults* who have been subject to frequent attacks of epilepsy, during several successive years, the disease often proves incurable. Yet an effort should be made, for in some instances cures have been effected, even under circumstances which have promised little hope of success. Whenever patients have warning of an attack several hours previous to its occurrence, a course of medicine should be administered, and whilst steaming, keep the head wet with cold water, or vinegar, or occasionally dash a tumbler of cold water in the face. If a full course be not given, the feet of the patient may be placed in warm water—an injection administered, followed by full and frequent doses of the third preparation or some other form of lobelia, and the head kept wet with spirits, vinegar, or cold water. A dash of cold water in the face, or the application of volatile salts to the nostrils, will sometimes prevent an attack, at least for a time.

Patients are apt to injure the tongue during the paroxysm of epilepsy, unless prevented by the insertion of a piece of wood or cork, between their teeth. In cases of long standing, it may be useless to attempt to do more during a paroxysm, than to protect the patient from injury.

After a Paroxysm, in children, and in all cases where there is reason to believe that the disease is occasioned by a disordered stomach, or bowels, an emetic must be given as soon as the patient can be made to swallow. If the stupor continue, injections must be administered. Vomiting may be effected in this way, by the lobelia powder, administered in warm water, and retained in the bowels.

When convulsions are caused by suppressed menstruation, or a disordered condition of the uterine organs, the patient must be kept warm in bed, stimulating enemas used to the bowels, warm applications to the feet, and an emetic given whenever the symptoms demand it. Thus, if a female be subject to epilepsy or even hysteria, at a certain time in the month, she should go through a course of medicine a day or two previous to the time when the paroxysm is apt to occur, and continue for several days the use of the means above mentioned.

Epilepsy is generally incurable when it is caused by an organic disease of the brain or spinal marrow. When it arises from other causes, such as indigested food in the stomach, affections of the bowels, liver, or uterine organs, a cure may be effected.

SECTION IV.

INFANTILE CONVULSIONS.

Convulsions frequently occur in childhood, and more especially in infancy. During this tender period, the functions of the brain are liable to become disordered, or suspended, from various causes. In some large families of children, the predisposition to convulsions is so strong that every one of them will have fits during the period of teething. In other families this form of disease is very rare, although the gums may be equally irritated and painful, and the digestion even more impaired.

Causes.—Indigested food in the stomach, irritation of the gums from teething, or worms in the stomach and bowels, are the general causes of convulsions in infants and children.

The use of anodynes, laudanum, and various other preparations containing opium, predispose infants to convulsions by their tendency to produce congestion of blood on the brain. The following circumstance was related to me by a lady, intimately acquainted with the family in which the melancholy affair happened. A nurse wishing to visit a friend, gave an infant a dose of laudanum, that it might not need attention in her absence. Soon after it was given, the child was seized with convulsions, which continued to return at frequent intervals, requiring constant watching day and night up to the time when this statement was made to me, being a period of two years. The faculties of the mind were destroyed by the fits, with scarcely the possibility of remaining for life other than an idiot.

Thousands of children have their intellectual powers injured by being forced to swallow anodynes. Laudanum occasions sleep by producing partial congestion of the blood in the brain; and it eases pain by benumbing the sensibility of the nervous system.

Children are peculiarly liable to convulsions during the early stages of eruptive disease,—small-pox, measles, and scarlet fever. More especially are they apt to occur a short time previous to the eruption. On the event of the eruption striking in, convulsions are very frequently observed. In very young infants, the cold stage of "fever and ague" is sometimes accompanied by convulsions.

In children, as well as in adults, the cause of convulsions is some-

times seated originally in the brain or spinal marrow, rendering medical means unavailing.

Fatality.—Death from convulsions, though of very rare occurrence in adults, in infants and children is by no means uncommon. "In ordinary constitutions there is but little to be apprehended from convulsions during infancy, when the attacks are slight and of short duration; and this observation applies especially to those instances which, instead of leaving the infant in a dull lethargic condition, are almost immediately succeeded by the natural cheerfulness of the child."

Unfavourable Symptoms.—When the convulsions are of long continuance, attended with a dark, or purple appearance of the countenance, palsy of one side, or of a limb, squinting, and difficult and stertorous breathing, the symptoms may be considered unfavourable.

Treatment.—Infantile convulsions are caused in the great majority of instances by constitutional disorder, the seat of which is in the stomach and bowels, and require for their cure that kind of treatment best adapted to cleanse the stomach and bowels, and restore their natural functions, and also to equalize the circulation of the blood and nervous fluid. The various preparations of lobelia, and the vapour bath are the means most to be relied upon for fulfilling these indications.

When a child has symptoms of approaching spasms such as twitching of the muscles and fever, an emetic should be given at once, and keep the system under the influence of lobelia.

Anti-Spasmodics are especially indicated in the treatment of convulsions, of which the third preparation of lobelia is the best probably that can be used. I have never heard of an instance of a child being suffocated by stimulating medicine, but I have known of two instances where death was occasioned by castor oil being poured into the throat. The simple tea of brown lobelia, made by pouring warm water upon the pulverized lobelia seed, will prove most effectual in relaxing the system, and it may be either given by the mouth, or administered by injection. When stimulating medicine reaches the throat, instantly the wind-pipe is closed against its passage, and thus the medicine is conducted to the right passage to be carried into the stomach, notwithstanding the unconsciousness of the patient. When the sensibility is very low, a substance like castor oil might glide into the wind-pipe instead of the proper passage, and in this way occasion suffocation.

The use of injections is particularly indicated on account of their

tendency to atract the circulation to the bowels, and thereby lessen the pressure of blood upon the brain. If the patient remain in a state of stupor after the paroxysm, stimulating injections should be administered. From one to two teaspoonsful of the third preparation may be administered in each injection, in bayberry, or composition tea, and this repeated every few minutes.

SECTION V.

CHLOROSIS—GREEN SICKNESS.

The term *chlorosis* is applied to a form of disease in which there is marked paleness of the skin, absence of the natural red colour of the lips, swelling of the eye-lids, a soft and flabby state of the skin, loss of flesh, general coldness of the system, a tendency to a swelling of the feet and ankles, loss of appetite, and torpor of the bowels. The tongue is pale, swollen, and more or less furred. Menstruation is deficient, and sometimes this evacuation is entirely suppressed. There is frequently a craving for pickles, chalk, or cinders.

As the disease becomes more deeply seated, the countenance is still more pallid, and sometimes assumes a yellow or greenish appearance. "The skin is smooth, but is preternaturally dry. The tendency to dropsical swellings of the feet and ankles increase, but there is seldom any further wasting of the flesh. "The tongue clears and becomes smooth, but continues pale, with a slight but peculiar appearance of transparency, and has a lilac hue. The patient is affected with languor, lassitude and even serious weakness, being at once reluctant and unable to undergo fatigue." There are often severe attacks of pain in the side and head, palpitation of the heart, faintness and a sensation of suffocation. The bowels are inactive, with occasional attacks of diarrhœa; the stools are dark, fetid and scanty. The digestion is always greatly impaired, yet patients will sometimes have a craving appetite for food, as well as for indigestible substances, such as tea-leaves, coffee grounds, mortar from old walls, chalk, pickles, or charcoal, &c.

There is a peculiar tendency in this disease to a bleeding from the nose, stomach and bowels, or uterus. The blood discharged is pale and watery, sometimes scarcely producing a stain on linen.

An attack of chlorosis though not free from danger, is generally curable by judicious treatment early applied, before the disease assumes an inveterate character.

In chlorosis the amount of heat and nervous energy generated in the system is much less than is produced in a state of health; every organ in the body is in a torpid condition; the secretions are diminished, but little bile is formed; the mucous membrane of the stomach and bowels is coated with thickened secretions forming a false membrane; digestion, assimilation and nutrition, are imperfectly performed; and the blood is in a weak and impoverished condition.

Treatment.—The general course of treatment indicated for the cure of the above form of disease is as follows:

1st. To warm the system by the use of *pure stimulants* and *external warmth.*

2d. *Courses of medicine.*—To be administered as the circumstances of the case may demand.

3d. *Injections* to evacuate and tone the bowels, and also to act upon the uterine functions, through nervous influence.

4th. The continued use of pure stimulants and the strongest kinds of bitters or tonics. Gentle exercise, fresh air, and a light nourishing diet are important curative means in the treatment.

Course of Medicine.—There is no plan of treatment that can fulfil so many important indications for the cure of this disease as a course of medicine. Under its influence a new action is awakened throughout the whole system. The steam imparts warmth to the blood, equalizes its circulation, strengthens the nervous energy, increases the sensibility of the stomach to the impression of medicine, and for a time restores the functions of the skin. The chest expands more freely, affording a greater supply of air to the lungs, thereby augmenting the vitality of the blood. By the emetic the stomach is relieved of matter which had oppressed its functions; the efforts to vomit whilst the system is relaxed tends to remove obstruction in the liver and in other important organs. The stimulus of the medicine augments the secretions and occasions a determination to the surface. Injections relieve the bowels, and exert a beneficial influence upon the uterine organs, the functions of which are always deranged in chlorosis. Lastly, but not least in importance, under the operation of the course of medicine, more or less of the false coating or "canker" becomes detached and removed from the mucous membrane of the stomach and bowels. *This false membrane must be removed before the general health can be restored.* I have known, on several occasions, quarts of a skinny-like substance discharged by the bowels in cases of chlorosis, which probably had been formed in the early period of the disease.

Repeating the Course.—As a general rule the course of medicine will require to be administered most frequently in the earlier period of the disease. When the disease has become deeply seated, and

the system cold, torpid, and much weakened, it may not be necessary to repeat a course oftener than once in two or three weeks.

Preparing the Emetic.—In all cases where there is great want of tone in the stomach, and a general torpor prevails throughout the system, the liquid of the third preparation of lobelia is the most effectual emetic. It should be given in a very strong tea of bayberry or sumac. There is no form in which lobelia can be prepared to operate so effectually and at the same time so easily, and with so little retching as that of the third preparation of lobelia in a very strong tea of bayberry or sumac.

Milk porridge, or gruel, seasoned with salt and pepper, must be given both during and after the operation of the emetic.

Of Injections.—Stimulating injections to the bowels, by attracting the vital energies to the uterine organs, fulfil an important indication in the treatment of suppressed or obstructed menstruation. The injections may be prepared of bayberry tea, adding to each injection a teaspoonful of the third preparation of lobelia, or a teaspoonful of No. 6, and a teaspoonful of green lobelia powder; or of composition, or pennyroyal tea, adding the green lobelia, and No. 6. The injections to be repeated once or twice a day, and continued. Besides these, a strong tea of poplar, Peruvian bark, used by injection at night, and retained until morning, will be useful.

White mustard seed or prepared charcoal may be used to aid in stimulating the bowels to action.

The Compound Lobelia Pills may be used as a general medicine in all cases of chlorosis. Ten or twelve of these pills may be taken daily, and they furnish a moderate and permanent stimulus to the stomach and bowels, and exert a beneficial influence in correcting their secretions. When liquids oppress the stomach, or the patient prefers medicine in the form of pills to decoctions, tonics as well as the stimulants may be given in this form—such as quinine pills, and pills composed of bitter extracts.

Tonics.—Bitter tonics may be employed in any stage of this or any other form of chronic disease, when the patient is clear of fever. They are particularly called for after the patient has been awhile under the treatment already described. Besides the usual tonics, precipitated carbonate of iron may be given with especial benefit in this and in other cases of chronic disease. The dose is from half a teaspoonful, mixed with mucilage of slippery elm, or gum Arabic and repeated three or four times a day. The tincture of guaiacum is a favourite tonic with some practitioners in chlorosis and in other cases of obstructed menstruation.

Gum myrrh is a useful tonic in Chlorosis. It may be formed into pills, and three or four taken after each meal, or the myrrh may be finely pulverized, mixed with quinine or bitter extracts, and the compound formed into pills.

The Diet must be light and nourishing, not to be confined, however, to vegetables. Wild game, fresh beef and mutton, eggs, and whatever is found to agree with the stomach. Pastry and hot bread of every description must be avoided.

The patient should seek the open air; use gentle exercise; keep the feet well protected from dampness; and occasionally sponge the surface with salt and water in the morning.

SECTION VI.

HYSTERIA—HYSTERIC FITS.

Hysteria presents in different cases a great diversity of symptoms. It mostly occurs in paroxysms.

Symptoms.—At one time "the fit consists of excessive laughter alternating with crying or screaming; and at another with mental alienation, rapid and incoherent talking, singing, suffocating spasms in the throat, a wild and furious expression of countenance, raving, gnashing the teeth, tearing out the hair, beating the breast with the hands, biting, &c. Occasionally these symptoms subside without terminating in convulsions. More commonly, however, convulsions of a terrific character speedily ensue." During the spasms "the body is usually rigidly bent backwards, or variously and most powerfully contorted; the breast is projected forward and the head drawn backwards; the face is swollen; the tongue protruded, or the jaws firmly closed; the eyes rolling; prominent, and red; the teeth gnash; the fists are clenched; the arms spasmodically thrown about, and the abdominal muscle powerfully contracted; in short, the whole muscular system is thrown into such violent spasms that scarcely any effort of the by-standers is sufficient to restrain the contortions, or prevent the patient from being thrown out of bed."

"When the paroxysm ceases, the patient is left in an exhausted or stupid and somnolent condition, which in the course of an hour or two passes away without leaving any other affections than a feeling of general soreness, and a slight pain in the head and pit of the stomach."

Sometimes instead of spasms, stupor and insensibility ensue, the limbs are in a relaxed condition, the jaws firmly closed, the eyes shut, the countenance nearly natural, the breathing irregular, the pulse slow and regular, the extremities are cold, and the power of swallowing is lost. Young females sometimes remain in this condition many hours, or even the whole day or night.

Hysteria never occurs in childhood, it being almost exclusively confined to the period which intervenes between the fourteenth and fiftieth years. It is almost peculiar to females, still the disease, in a mild form is occasionally observed in men, more especially those who lead a sedentary life, and are delicate, and of a nervous temperament.

Patients subject to hysteric fits, are apt to feel a tenderness in some part of the spine when it is pressed upon, which fact has led some physicians to view hysteria as a disease depending upon irritation of the spinal marrow. Other theorists contend that its seat is in the uterus, whilst others again locate the disease in the brain. It would be useless in a practical point of view, to attempt to sustain or refute any of these theories, as the disease, in all cases, must be treated upon general principles, applying the remedies to suit the emergency of the case.

Treatment.—Hysteric fits are generally preceded by extreme languor, coldness of the hands and feet, and distress at the pit of the stomach. At this period stimulants should be given,—capsicum, composition, or spice bitters. No. 6, essence of peppermint, or lavender brandy, may be also used to expel wind from the stomach. The feet should be placed in warm water, and volatile salts applied to the nose.

If the symptoms be not relieved by the above means an emetic must be given, and the patient warmly covered, and warm bricks applied to the feet.

If spasms or fits come on, give the third preparation of lobelia; or brown lobelia powder in lukewarm water.

Females are sometimes thrown into violent convulsions in consequence of obstructed menstruation. In such cases the brown lobelia or third preparation must be given freely, warmth applied to the feet and injections administered if practicable.

The Vapour Bath.—Warm vapour applied to the surface soothes nervous agitation, and is signally beneficial in all cases of hysteric affections. When the system is very cold, a bath preceding an emetic will materially assist the operation of the latter.

Injections.—Stimulating enemas are scarcely less important, both as a preventive and curative means, in hysteria. The liquid of the third preparation of lobelia, or the lobelia powder in No. 6, is

to be administered in warm water, bayberry, composition, or skull-cap-tea. When there is a violent determination of blood to the head, the use of stimulating enemas are particularly called for, as they prove an efficient means of equalizing the circulation of the blood, and of sustaining and equalizing the nervous influence. Mustard plasters applied to the feet and palms of the hands may have a beneficial influence in soothing nervous agitations.

Antispasmodics.—The third preparation of lobelia is the best antispasmodic, and it also answers as an emetic and stimulant. This medicine may be given in teaspoonful doses at any time when the patient can swallow. Even during hysteric convulsions, the liquid of the third preparation poured into the sides of the mouth when the teeth are firmly closed, will have an influence in shortening the paroxysm, even though the medicine should not be swallowed.

Musk may be employed with benefit in hysterical paroxysms. The high price of the article, however, together with the circumstance of its being rarely found in the shops free from adulteration, has occasioned the almost entire abandonment of its use in practice.

Warm fomentations are useful to relieve pain in the chest or abdomen. If the head be hot, cloths wet with cold water, spirits or vinegar, may be applied, and changed frequently.

"In that variety of paroxysmal hysteria," says Dr. Eberle, "in which the patient lies in a state of torpor and insensibility distinct from syncope, I know of no remedy so effectual for dispelling the attack as an emetic." If the patient cannot be made to swallow, lobelia administered to the bowels in full doses and retained, will have the same effect upon the system as when taken into the stomach. A mustard plaster, or pepper poultice applied to the pit of the stomach, will aid in exciting vomiting. When mustard is employed it should be removed before it blisters the skin.

During violent paroxysms of hysteria it will be useless in many instances, to attempt to administer medicine until the spasms subside. As soon as the spasms give way, and the patient can swallow, an emetic should be given with a view to prevent the return of the convulsions. The best form of emetic in all such cases is, a large teaspoonful of the liquid of the third preparation of lobelia, with about an equal quantity of lobelia powder, mixed in a teacup two-thirds full of bayberry or sumac tea. The emetic to be repeated until vomiting is effected. Acids in the stomach interfere with the operation of emetics, and whenever the emetic is slow in its operation, a teaspoonful of the bi-carbonate of soda, or half the

quantity of sal æratus should be given, dissolved in a teacupful of lukewarm water.

It has been observed by some practitioners, that in cases of hysteric convulsions, when the patient complains of pain in the stomach, the spasms cease—the medicine in restoring the power of the stomach to control the nervous influence, equalizes the circulation.

Chronic Hysteria.—Unmarried females whose digestive powers are greatly impaired, who are of a weak habit of body, and nervous temperament, and more especially those who are subject to deficient, too profuse, or too frequent menstrual evacuations, are peculiarly liable to hysteric symptoms. "They are always complaining of some unpleasant or painful sensations; their temper is variable, often fretful, sometimes animated, talkative, and anon peevish and gloomy; they pass often rapidly from laughing to crying, from gaiety to melancholy, from despondency to hope, and *vice versâ*, from the most trifling causes. They often complain of various distressing sensations in the abdomen, head, and chest, flatulency, a rumbling noise in the bowels, severe colic pains, a sense of weight and bearing down in the region of the uterus, pain in the neck of the bladder, dysury, a feeling of emptiness or fulness and tension at the pit of the stomach, variable appetite, slow digestion, eructations, occasional spells of great anxiety and alarm, palpitation of the heart," faintness, a peculiar sensation of weight, or of numbness in the top of the head, severe pains in the head, breast, or other parts of the body, and sometimes the sensation of a ball rising in the throat.

Treatment of Chronic Hysteria.—Hysteric symptoms that have been of long continuance, can be cured only by restoring the general health of the patient. To accomplish this, an occasional *emetic* or *course of medicine*, stimulants and tonics, are the remedies chiefly to be employed.

Dr. Dean, of Harrisburg, (Pa.) observes, "in some cases where the patients had laboured under this disease for ten years, and during that time had, by the advice and directions of respectable physicians, exhausted, with at most, but temporary benefit, the whole class of remedies which are usually prescribed, I have, by the continued exhibition of vomits, either entirely removed the complaint or so far removed the habits of diseased action in the stomach, that antispasmodic and tonic medicines would in general complete the cure." (Eberle.) The proper time for giving an emetic or a course of medicine is when the patient feels more distress than usual.

Tonics—Gum myrrh is a useful tonic in hysteric complaints,

when the disease is associated with an excessive flow of the menses. The myrrh should be finely pulverized, and formed into pills, three or four of which may be taken after meals; or a decoction made of it by steeping it in boiling water.

Other tonics, such as columbo, gentian, balmony, unicorn root, barbary, Virginia snake root, and prickly ash, may be employed either simply or in combination.

The precipitated carbonate of iron may be employed with more benefit than any other tonic in some instances. The dose from half to a teaspoonful three times a day, taken in mucilage of slippery elm.

When the patient has a craving for some particular substance, such as acids, chalk, or charcoal, they should be used unless they are found to disagree with the stomach.

I have in several instances known patients to eat freely of bread and butter dipped in vinegar, which agreed with the stomach.

Charcoal is decidedly beneficial where the bowels are habitually constipated, or when the patient is harassed with sour eructations or heartburn.

When the bowels are habitually costive, to use injections of a decoction of aspen poplar and bayberry bark at bed-time, and retained until morning, will relieve the bowels and at the same time increase their strength and tone. Purgative medicines must be avoided, for notwithstanding they may afford momentary relief, yet eventually the functions of the bowels will be always weakened by them. By a proper course of constitutional treatment, joined with a well-regulated diet and regimen, and an abandoment of cathartic medicine, the functions of the bowels will finally be restored.

SECTION VII.

FAINTING

A DEFICIENCY of arterial blood in the brain is the usual cause of fainting. Thus, persons bled whilst sitting up will faint much sooner than when lying with the head on a level with the body. Persons who are very weak from sickness, are liable to faint from sitting up too long. Some faint at the sight of blood; others from sudden fright or from any other violent mental emotion.

Symptoms.—These are, sudden loss of sensibility, and of the

power of motion; the breathing and pulse scarcely perceptible, or entirely suspended, and the countenance and lips pale and bloodless.

Treatment.—The immediate cause of fainting being a deficiency of arterial blood in the brain, the most important indication is to place the head as low or lower than the level of the body, with a view to favour a supply of blood to the brain. Cold water may be sprinkled or dashed on the face; all tight dresses loosened; and salts of hartshorn, cologne, or camphor, applied to the nose.

If fainting occur in a close room or crowded assembly, the patient must be taken into the open air, and if the weather be very warm, fanning will be of advantage. A person fainting in an assembly is very apt to be so closely surrounded by the bystanders, as to intercept the circulation of air around the patient. This should be prevented on all occasions where a patient has fainted.

Very weak patients are liable to faint from sitting up to take a vapour bath. When they first begin to feel faint, a dash of cold water in the face, holding the head downward for a few moments; for instance, resting the head low on a chair, or being held by an assistant, and applying some volatile stimulant to the nose, usually revive the patient and enable him to continue in the bath the usual time required in steaming.

SECTION VIII.

HYPOCHONDRIASIS.

(*Dejection of Mind—Low Spirits.*)

This unhappy and *ill-foreboding* state of mind, termed hypochondriasis, is principally confined to persons in advanced life, and it is always associated with feeble digestion. There is distress at the pit of the stomach; flatulency and acid eructations; extreme coldness of the hands and feet; torpid bowels; and either a dry, or cold and clammy state of the skin. Very frequently the countenance is sallow; indicating a torpid state of the liver. Lowness of spirits, however, attends bad health at all and every age; but it is not hypochondriasis, except when there is a fixed despondency, the conversation and appearance of the patient manifesting extreme depression of mind, or perversion of the imagination.

Characteristic Symptoms.—"A disposition to seriousness, sadness and timidity as to all future events; an apprehension of the worst and most unhappy state of them, and therefore, on slight ground, a dread of approaching evil." The patient thinks and talks about his unhappy condition, and observes every change of feeling in his body with apprehensions of danger. In some instances the nervous system will be shocked with the most trifling noise, causing the patient to startle even at the dropping of a knife at the table, and occasion a very unhappy state of mind, sometimes exciting a revengeful feeling, even against their offspring. I have known patients labouring under this distressing weakness, to be unable to bear the slightest noise from the innocent mirth and playfulness of their own children, requiring them to be kept out of sight and hearing. In other instances the mind sinks into a kind of sullen gloom, with constant forebodings of coming evil.

Causes.—The immediate cause of this dejected state of mind, technically called "hypochondriasis," is *exhaustion of nervous power.* Severe mental labour, indolent habits, inveterate dyspepsia, domestic trouble, debauchery, the excessive use of tobacco, or the long-continued use of opium, are, in many instances, the remote cause of that dejected state of mind consequent upon a torpid and enfeebled condition of nervous energy.

The habit of viewing the *dark-side*, only, of events, and yielding the imagination to gloomy forebodings, exerts a depressing influence upon the brain—weakens the energies, and consequently impairs the powers of digestion, and thus may be laid a foundation for continued despondency.

The advice contained in the following lines may be found apropos to those of a desponding disposition.

"*Never look sad—nothing so bad*
As getting familiar with sorrow;
Treat him to-day in a cavalier way,
And he'll seek other quarters to-morrow."

"*Long you'd not weep, would you but peep*
At the BRIGHT SIDE *of every trial;*
Fortune you'll find, is oft most kind,
When chilling your hopes with denial."

"*Let each sad day, carry away*
Its own heavy burden of sorrow;
Or 'tis likely you'll miss, half of the bliss
That comes in the lap of to-morrow."

"When hope is wreck'd, pause and reflect
If error occasioned your sadness;
If it be so, hereafter you'll know.
How to steer to the harbour of gladness."

Patients advanced in years, however, whose nervous energy is greatly exhausted, have not the power to prevent despondency of mind, any more than they can prevent a fit of ague at will.—The general health must be improved, and the nervous influence aroused from its torpid state before the mind can be raised from its sunken, dejected condition.

Treatment.—When depression of mind is caused by a disordered state of the system, the most effectual medical remedies are, courses of medicine administered at proper intervals, together with the use of composition, or cayenne and bayberry, followed by the use of bitters.

A course of medicine, by cleansing the stomach, and awakening a new action in the system, will frequently be attended with the most happy effects upon the mind. In deeply seated cases, however, the course of medicine will have to be repeated occasionally for a period of several months, before the general health can be thoroughly restored.

Capsicum is the best stimulant, and should be taken at meals or soon after eating: the powder may be taken in lukewarm or cold water, or it can be taken in the form of pills.

The compound lobelia pills answer as a stimulant, and they will act efficiently on the secretions, both of the skin and mucous membrane of the stomach and bowels. A patient whose mind was greatly depressed from ill health, took from forty to fifty of the compound lobelia pills daily, besides three or four teaspoonsful of capsicum, without making any sensible impression on the stomach and bowels. After taking several courses of medicine, and continuing the use of the stimulants above mentioned, a skinny substance began to pass from his bowels, and continued to pass from them for weeks. At the time this skinny substance was passing, the patient experienced frequent griping pains in the bowels, a symptom which is complained of under the use of Thomsonian remedies in seated diseases. The above treatment, together with the use of bitters, the steam and shower bath, exercise in the open air, and a light nourishing diet, succeeded in restoring the general health of the patient, and raised his spirits from a state of extreme depression and melancholy.

There are cases of low spirits in which moral influences are of more importanee in the cure than medical treatment. In two instances I have known despondency and extreme dejection of spirits to be occasioned by a retirement from business. In one of these cases, the patient took several courses of medicine, but still the low spirits continued until he resumed business, and his former active habits. In the other case the gentleman also resumed his former active habits, by which the strength, both of body and mind, were reinstated.

When the nervous energy becomes depressed from too close application of the mind to study or business, exercise in the open air, travelling, and cheerful society are important.

Reading entertaining books, and every kind of innocent amusement should be indulged in, to divert the mind, and bring new objects into view, when it is not convenient for the patient to perform a journey.

Various means have been successfully employed for the cure of the *hypo*, as it is usually called.

The following is from the *Medical Companion*, written by James Ewell.

"Some hypochondriacs have fancied themselves miserably afflicted in one way, and some in another—some have insisted that they were TEA-POTS, and some that they were TOWN CLOCKS. This that he had a big belly, another that his legs were glass—one that he was extremely ill, another that he was actually dying. But I have never heard of any of this blue-devil class whose extravagance ever yet came up to the following, which was related to me by my noble hearted old friend, the late Dr. Stevenson of Baltimore, whose name sounds in my ears as the summary of every manly virtue.

"'This hypochondriac, who, by the bye, was a patient of Dr. Stevenson's, after ringing the change on every mad conceit that ever tormented a crazy brain, would have it at last that he was dead, actually dead. Dr. Stevenson having been sent for one morning in great haste by the wife of his patient, hastened to his bed-side, where he found him stretched out at full length, his hands across his breast, his great toes in contact, his eyes and mouth closely shut, and his look cadaverous.

"'Well, sir, how do you do? how do you do this morning?' asked Dr. Stevenson, in his blustering, jocular way, approaching his bed-side. 'How do I do!' replied the hypochrondiac faintly, 'a pretty question to ask a dead man!' 'Dead!' replied the doctor. 'Yes sir, quite dead: I died last night about twelve o'clock.'

"Quick as lightning Dr. Stevenson caught his cue, which was to strike him on the string of his character, on which the Doctor recollected he was very tender. Having gently put his hand on the forehead of the hypochondriac, as if to ascertain whether it was cold, and also having felt his pulse, he exclaimed in a doleful tone, "Yes, the poor man is dead enough—'tis all over with him, and the sooner he can be buried the better. Then stepping up to his wife, and whispering her not to be

frightened at the measures he was about to take, he called to the servant, 'My boy, your poor master is dead, and the sooner he can be put under ground the better. Run to Mr. C——m, for I know he always keeps New England coffins by him, ready made, and do you hear, bring a coffin of the largest size, for your master makes a stout corpse, and having died last night, and the weather being warm, he will soon begin to smell.'

"Away went the servant, and soon returned with a proper coffin. The wife and family having got their lesson from the Doctor, gathered around him and howled no little, while they were putting the body in the coffin. Presently the pall-bearers, who were quickly provided, and let into the secret, started with the hypochondriac for the church-yard. They had not gone far before they were met by one of the towns-people, who, having been drilled by the facetious Stevenson, cried out, 'Ah, Doctor! what poor soul have you got there?'

"'Poor Mr. B——' sighed the Doctor, 'left us last night.'

"'Great pity he had not left us twenty years ago,' replied the other, 'for he was a bad man.'

"Presently another of the towns-men met them with the same question, 'And what poor soul have you got there, Doctor?'

"'Poor Mr. B——,' answered the Doctor again, 'is dead.'

"'Ah, indeed!' said the other, 'and so the devil has got his own at last.'

"'Oh, villain!' exclaimed the man in the coffin, 'if I was not *dead*, how I would pay you for that.'

"Soon after this, while the pall-bearers were resting themselves near the church-yard, another one stepped up with the old question again: 'what poor soul have you got there, Doctor?'

"'Poor Mr. B——,' he replied, 'is gone.'

"'Yes, and to h—ll,' said the other, 'for if he has not gone there, I see not what use there is in such a place.'

"Here the dead man, bursting off the lid of the coffin, which had been purposely left loose, leaped out exclaiming, 'Oh, you villain! I am gone to h—ll, am I!—well I have come back again to pay such ungrateful scoundrels as you are.' A race was immediately commenced between the dead man and the living, to the petrifying consternation of many of the spectators, at sight of a corpse bursting from the coffin, and in all the horror of a winding sheet, racing through the street. After having exercised himself into a perspiration by this fantastic chase, the hypochondriac was brought home by Dr. Stevenson, freed of all his complaints. And by strengthening food, generous wine, cheerful company, and moderate exercise, was soon restored to perfect health."

The disordered state of mind exhibited in the above case, doubtless was occasioned by a torpid circulation of blood through the brain, and from extreme deficiency of nervous energy. Whether any other means than those resorted to by Dr. Stevenson could have succeeded in arousing an action in the system sufficient to cure the disordered imagination of the patient, is a question not readily answered.

"A certain hypochondriac, who for a long time fancied him-

self dying of a liver complaint, was advised by Dr. Crawford, of Boston, to make a journey to the state of Ohio. After an excursion of three months, he returned home, apparently in good health; but upon receiving intelligence of the death of a twin brother who had actually died of a schirrus liver, he immediately took the staggers, and falling down, roared out that he was dead, and had as he always expected, died of a liver complaint. Dr. Crawford being sent for, immediately attended, and asked the hypochondriac how he could be dead, seeing he could talk. But still he would have it that he was actually dead. Whereupon the sagacious Doctor exclaimed, "Oh yes, he is certainly dead, and it is more than probable his liver was the death of him. However, to ascertain the fact, I will hasten to cut him open before putrefaction takes place." And thereupon, getting a carving knife, and whetting it as a butcher would to open a dead calf, he stepped up to him and began to open his waistcoat, when the hypochondriac, horribly frightened, leaped up with the agility of a rabbit, and crying out, "Murder! Murder!!" ran off with a speed that would have defied a score of doctors to catch him. After running a considerable distance, until he was almost exhausted, he halted; and not finding the doctor at his heels, soon became composed. From that period this gentleman was never known to complain of his liver; nor had he for more than twenty years afterward, any symptoms of this disease."—*Ewell's Medical Companion.*

Persons labouring under depression of spirits from ill-health are often accused of being "*hiped*," a term employed to designate a weakness which the patient could overcome or control at will. Insinuations of this kind, generally come from persons ignorant of the controlling influence, which a disordered condition of the digestive organs exerts upon the spirits.

SECTION IX.

ST. VITUS' DANCE.

Symptoms.—It commences with twitching or jerking of the muscles of some portion of the body, generally first observed in the face or in one of the limbs. These sudden contractions of the muscles are usually slight at first, occurring only occasionally, and more particularly when the mind is grieved or agitated. By degrees these jerking motions increase, until, in many instances, almost every muscle in the body is affected with spasmodic contractions. In many instances the contractions are much stronger on

one side of the body, and frequently they are confined almost exclusively to the left side. "From the imperfect command of the will over the voluntary muscles, the patient, when he attempts to walk, has a starting, hobbling, and irregular gait, with an awkward dragging of one of the legs." Sometimes the arms and legs are thrown into such confused motions, that the patient will be unable to walk, or even to stand alone. He is often unable to direct his hand to his mouth, requiring to be fed by another person.

"At first the expression of the countenance, in the intervals of the spasmodic motion, is that of good humour and contentment." In a later period of the disease, however, the countenance loses its expression of cheerfulness, the temper is irritable, and sometimes the intellect is enfeebled. "Slight paralysis occasionally occurs on one side of the body."

When the patient sleeps, the jerking motion of the muscles is entirely suspended.

Patients affected with St. Vitus' Dance are generally worse at a particular time of the day.

The appetite is variable; sometimes voracious—at others feeble. The tongue is slightly coated, and generally somewhat contracted. Digestion is more or less impaired; the bowels are usually inactive, and the stools seldom have a healthy appearance.

St. Vitus' dance is usually confined to the period of life which intervenes from the eighth to the twentieth year.

Causes.—Constitutional disorder, more especially a deranged condition of the digestive organs, is the chief cause of St. Vitus' dance. Among the occasional causes of this disease are, violent mental emotions; sudden fright, or anger; "repelled cutaneous eruptions;" suppression of the menses; and exposure to cold and damp.

Not Dangerous.—St. Vitus' dance very rarely proves fatal. The few instances that have been known to terminate fatally, with "*slow irritative fever*" have probably been experimented upon by medicines which have poisoned the stomach, and destroyed the vital principle.

Duration.—In some instances this disease continues only a few days; in others it is prolonged to many months, or even years. When the disease is wholly dependent upon a disordered condition of the stomach and bowels, it is more readily cured than when it has been brought on by sudden alarm or other violent emotions of the mind. Girls attacked with St. Vitus' dance, about the age of thirteen or fourteen, are seldom permanently cured until menstruation becomes fully established. The disease is also apt to become

protracted when associated with chronic derangement of the general health.

Treatment.—The following plan of treatment I have known to succeed in curing several cases of St. Vitus' dance, viz:—In the first place, give broken doses of lobelia, sufficient to occasion slight nausea; a course of medicine administered occasionally; a shower bath every morning, sometimes preceded by a vapour bath; and as the tongue begins to clean, or the skin becomes pale, and the system relaxed, give *tonics.*

On administering Broken Doses of Lobelia.—Lobelia may be administered in the form of pills, tincture, or the powder mixed in warm water. In some cases it is necessary to give as much as a teaspoonful of brown lobelia powder at a time, and this frequently repeated in order to effect even slight nausea.

In the case of a little girl labouring under St. Vitus' dance, the brown lobelia powder was given in full doses, and frequently repeated without producing the slightest nausea, or causing any perceptible degree of relaxation, until several courses of medicine had been given. At the end of the third week from the commencement of the treatment, the patient became much distressed and deathly sick under the influence of lobelia administered after the vapour bath. She tossed about in every direction, and continued in this way six or seven hours, the system being much relaxed. After this operation, the patient began to mend rapidly. The compound lobelia pills are convenient to take, and may be used with as much benefit, probably, as any other form of lobelia. From twelve to twenty pills should be taken daily.

The Vapour Bath is particularly beneficial in St. Vitus' dance, especially when the skin is in an unhealthy condition. The bath may be repeated daily, or every few days, as the circumstances of the case may indicate. After steaming, the patient must be showered with cold water, rubbed dry, and the surface bathed with No. 6, or some stimulating liniment.

Emetics.—These may be given once a week, or at longer or shorter intervals, as the character of the symptoms may demand. Brown lobelia powder, infused in strong composition tea, is a proper form of emetic to administer to children. Lobelia, administered by injection, in warm water, and retained several minutes, will occasion vomiting and relax the system as effectually as when swallowed. I have been sent for on several occasions where families have become alarmed by the extreme relaxation occasioned by lobelia injections. All that is required is to bathe the face, breast, and hands with spirits, or vinegar and water. It is well,

however, to give occasionally some stimulant, No. 6, capsicum tea, composition, or even simple herb teas, pennyroyal or mint, together with some light nourishment—milk porridge or chicken tea. I never knew an instance of St. Vitus' dance in which the disease did not moderate after the patient was fully relaxed under the influence of lobelia. I have on several occasions, however, given from six to eight teaspoonsful of lobelia powder to patients labouring under this form of disease, without causing any perceptible relaxation, or effecting even slight sickness; and then again, at another stage of the disease, one teaspoonful, or even half that quantity, will operate effectually both in cleasing the stomach, and relaxing the system.

The Cold Shower Bath is much employed in the treatment of St. Vitus' dance. This remedy is particularly appropriate in the more advanced stage of the disease, after the stomach has been thoroughly cleansed. The proper time for administering the cold shower bath, is in the morning, as soon as the patient is out of bed. After the bath is administered, the patient must be rubbed dry, wrapped in a blanket, and put in bed, and remain there half an hour or longer. If the patient experience a glow of warmth over the system, after the shower bath, it will be almost certain to prove beneficial.

Infusion of black snake root, and Pipsissewa in connexion with the use of the warm foot bath, and vapour bath, is recommended by Dr. A. C. Logan, in cases of St. Vitus' dance.

Tonics.—The spice bitters may be used in any period of the disease. In the more advanced stages of it, stronger tonics will be required. Quinine, wormwood, centuary, balmony, golden seal, or Virginia snake root. The skull-cap (*scutellaria latereflora*) may be employed both as a tonic and nervine. It may be taken singly in decoction, or combined with other tonics.

Injections.—When the bowels are very costive, injections may be used occasionally composed of salt, molasses and water, adding an even teaspoonful of green lobelia to each injection. Lobelia administered by injection, and retained, will benefit the patient as much as when taken into the stomach. When the disease has been of long continuance, however, or the patient feeble and emaciated, the vomiting will be best effected by the *third preparation of lobelia* taken into the *stomach.*

Astringent, or anti-canker medicine.—In the latter stages of the disease, or during any period when the tongue is coated and manifests a tendency to clean, a strong decoction of bayberry or sumac, or of the two combined, must be given as often as once a

day. In every case of St. Vitus' dance that I have attended, there has been a false membrane discharged from the bowels, and flakes of a similar substance thrown off by vomiting, about the time the disease gives way. Indeed I have sometimes been inclined to believe that a coating of thickened secretions over the mucous membrane of the stomach and bowels was a principal cause of the disease being protracted. The fact that patients recover soon after such a substance is observed to pass from the bowels, furnishes some proof in support of this opinion. May it not be the presence of a false membrane lining the stomach that renders this organ so extremely insensible to the impression of lobelia, observable in many instances in St. Vitus' dance?

The No. 3 pills will answer in the place of the astringent teas, and are much more readily taken. From three to six of these pills may be taken three or four times a day on an empty stomach.

Sea Bathing has been found particularly beneficial in the cure of St. Vitus' dance.

The Diet must be nourishing, and easy of digestion, such as boiled milk and toast, stale bread, crackers, fresh beef and mutton, poultry, eggs, custard, boiled rice, and all wholesome vegetables. All kinds of confectionery, cakes, hot bread, and pastry, must be avoided. The supper should always be light.

When St. Vitus' dance is dependent upon, or associated with, obstructed menstruation, the method of treatment already laid down will be appropriate to the case. Particular attention, however, will be necessary to keep the feet dry and warm, and to use frequently warm foot baths. When the period arrives at which the patient should be *unwell*, stimulating enemas should be administered to the bowels, composed of pennyroyal tea, adding a teaspoonful of lobelia powder to each; or of bayberry tea, with the addition of a teaspoonful of the third preparation of lobelia; the foot bath used daily, and the patient drink freely of composition or pennyroyal tea, and if the general health be much deranged, an emetic given. If there be much pain in the back or loins at this period the patient should be kept warm in bed, and bottles of hot water or hot bricks wrapped in damp cloths be applied to the back and feet.

SECTION X.

TETANUS.—LOCKED JAW.

Causes.—Locked jaw is sometimes caused by wounds; in other instances it is brought on by exposure to cold, when the vital powers are in an enfeebled condition. Sleeping in the open air, is very commonly an exciting cause of tetanus in hot climates. The use of narcotic poisons may also occasion tetanus. Wounds of the head, gun-shot wounds, and punctured wounds in the soles of the feet, and palms of the hands, are the kinds most apt to occasion locked jaw. "Tetanus is particularly apt to follow wounds in which a nerve is partly divided or lacerated, without being completely divided."

Symptoms.—This formidable disease usually comes on in a gradual manner. At first there are pain and stiffness in the back of the neck, slight spasms in the muscles of the throat, and distress at the pit of the stomach. In some instances these symptoms continue several days before the jaws become fixed. As the disease increases, the jaws become stiff and at length immoveable; great distress is felt at the pit of the stomach; the whole, or a part of the muscles of the body and limbs become rigidly and permanently contracted—the head is thrown backward, and the body is bent either backwards, forwards, or sideways. Sudden paroxysms of pain, and retraction at the pit of the stomach occur at frequent intervals, attended with violent spasmodic contraction of the muscles. "These paroxysms last usually but a few minutes—the muscles of the trunk and extremities resuming for awhile, a comparatively relaxed state; but those of the jaws remain firmly contracted during the remissions. In the latter period of the disease, the spasms remit but slightly and transiently: the patient is in an almost continued rack of torture; the muscular contractions are general and extremely violent; the countenance becomes frightfully distorted; copious sweats break out; the pulse is quick and irregular; the respiration hurried and laborious; the voice grating and unnatural; the eyes dim and watery, and the jaws immoveably locked. Towards the fatal termination of the disease, slight delirium generally occurs. At this period a severe spasm often terminates the scene."

"The usual mode of termination in fatal cases is by apoplexy. In some instances, all the muscles become completely relaxed a short time before death takes place. The patient seems to have emerged from his terrible malady. Every part of the body is in the ordinary state of relaxation. Suddenly, however, extreme

prostration of strength ensues. He becomes insensible and comatose; the countenance assumes a cadaverous expression, and death speedily follows."

Duration.—Locked jaw usually terminates before the fifth or sixth day. Occasionally, however, the disease is protracted for weeks.

Favourable Symptoms.—The remissions between the paroxysms becoming complete and of longer duration; a tingling sensation in the extremities, as if ants were crawling over the parts; a moist, and uniformly warm skin; an increased flow of saliva from the mouth; "and above all when the patient enjoys sleep," strong hopes may be entertained of an eventual recovery.

Locked jaw occasioned by causes which operate upon the system generally, such as sleeping on damp ground, or sudden exposure to extreme cold, is in general less fatal than when the disease is caused by wounds.

Preventive means in case of Wounds.—For severe wounds, more especially gun-shot wounds, especial care should be observed to prevent the admission of cold or damp air to the wound. This will be the surest means of protecting the patient from locked jaw. Warm stimulating poultices must be applied to the parts to favour suppuration.

When a punctured wound is received in the palm of the hand or sole of the foot, for instance, from a nail or pin, the wound should be enlarged a little with the point of a small lancet, bistourie or penknife, and No. 6, or spirits of turpentine poured in; and this repeated several times a day, and a warm poultice applied, with a view to occasion suppuration; or beat the part gently with a piece of wood, or the handle of a knife, with a view to attract blood to the part and to excite adhesive inflammation. Locked-jaw rarely or never occurs from such wounds when they discharge matter. "It has been observed," says Dr. Ewell, "that the less inflammation there is in the injured part, the greater will be the liability to tetanus. This circumstance has suggested the propriety of exciting inflammation in the wounded part by means of irritating applications." In almost every instance where locked jaw has been brought on from punctured wounds, as when a nail has penetrated the foot, the disease has not appeared until after the wound has closed, and the part free from inflammation.

If the patient be dyspeptic, or the general health otherwise deranged, a course of medicine must be given, followed by the free use of composition or capsicum, with a view to keep a determination to the surface. "An equable and comfortable temperature, with a

simple diet, and rest, are important auxiliaries in preventing this disease after wounds."

Treatment of Locked jaw.—On the first appearance of symptoms which indicate the approach of locked jaw, such as slight spasms in the throat, a sense of stricture and distress at the pit of the stomach, and stiffness in the neck and shoulders, a thorough and persevering course of treatment must be instituted. The means chiefly to be relied upon, are vapour baths, the third preparation of lobelia, and powerfully stimulating injections.

A full course of medicine must be administered without delay; after which the third preparation must be continued in teaspoonful doses, in bayberry tea, repeating the dose every hour or two as the circumstances of the case may require. When the symptoms are severe, the third preparation may be given in tablespoonful doses, and repeated as often as every half hour, until the symptoms assume a more favourable aspect, when the quantity may be lessened accordingly.

Steaming is highly important in the treatment of locked jaw, and in the early stage of the disease, and when the patient can sit up without difficulty, the vapour bath should be administered two or three times a day. The patient should be dashed with cold water at the close of the steaming, and after being rubbed dry, the surface bathed in No. 6, and when the patient is in bed, hot bricks, or bottles of hot water, wrapped in damp cloths, applied to the feet.

Injections composed of a teaspoonful, or even a tablespoonful of the third preparation of lobelia, in bayberry or composition tea, must be administered at intervals of every two or three hours. The strictest caution must be observed to protect the patient from the influence of cold air on getting out of bed, when he is in a perspiration. Unless the air in the room be at the summer temperature, the patient should continue under the bed-clothes.

When there is great difficulty in swallowing, the injections retained several minutes, and frequently repeated, will prove nearly, or quite as beneficial as if the medicine were taken into the stomach.

When the spasms are violent, a tablespoonful of lobelia powder may be administered occasionally by injection in lukewarm water, and retained, with a view to relax the muscles. When the third preparation of lobelia can be retained in the bowels, it should be used in general, in preference to the simple lobelia powder.

When the symptoms have abated, and the patient is weak and relaxed, wine-whey may be given freely as nourishment. Large quantities of wine have been given with benefit.

Quinine is as good a tonic as can be employed. It may be given in large quantities—from 10 to 20 grains at a time, and this repeated every few hours. Quinine is best adapted to a late period in the

disease, when the symptoms have assumed a more favourable aspect by the course of treatment as before mentioned.

Local Treatment.—If the disease arise from a gun-shot wound, or from any injury attended with sloughing, or with symptoms of mortification, a poultice should be applied, prepared in the following manner, viz: To a pound of wheat flour, add half a pint of yeast, and a large tablespoonful of fine ginger, and after mixing them well together, set the mixture by the fire until it begins to rise, then spread and apply it. The poultice must be kept warm, and changed morning and evening.

When a punctured wound is the cause of locked jaw, the wound should be opened with a lancet or other instrument, and every effort used to excite inflammation and the formation of matter, by pouring spirits of turpentine in the fresh wound, and applying warm stimulating poultices, such as a mixture of slippery elm and cayenne pepper. If the injury be on the hand or foot, the part should be steamed occasionally, in order to attract an afflux of blood to the part, and favour the formation of pus.

Either a mustard plaster or pepper poultice must be kept applied to the spine, extending from the nape of the neck eight or ten inches down the back. The mustard should not be allowed to cause a blister.

SECTION XI.

HYDROPHOBIA.

(*Bite of a Mad Dog, or other Rabid Animal.*)

This terrific disease is occasioned in the human system by the bite of a rabid animal. The poisonous saliva from the mouth of the animal is conveyed by its teeth into the wound, and when absorbed and carried into the system, brings on hydrophobia.

When this dreadful disease becomes firmly seated in the system, there is scarcely the possibility of effecting a cure by any medical treatment. Therefore when an individual is bitten by a mad animal, the most prompt measures should be used to prevent the absorption of the poison which may have been deposited in the wound. The most important preventive means, is cutting out the parts that are bitten, or burning with a red-hot iron, or with caustic potash.

Hydrophobia seldom occurs until three or four weeks after the bite is inflicted. More commonly the disease does not become developed until the sixth or seventh week after the insertion of the poison. "It is said that the disease comes on much earlier in hot climates than in temperate latitudes." The disease, however, may generally, if not always, be prevented, by cutting out the parts bitten, or by cauterizing it with a red-hot iron, down deeper than the wound itself.

When persons are bitten through their clothes, the poisonous saliva will in general be rubbed from the teeth as they pass through the clothing. Thus many who have been bitten by mad animals have escaped hydrophobia without having the wound either cut out or cauterized with a red-hot iron, having relied upon some reputed specific, such as elecampane stewed in milk, or other equally simple preparation, which could have had no possible effect in preventing the absorption of the poison, if it had been deposited in the wound. It is doubtful whether hydrophobia was ever prevented in a single instance by any of these reputed preventives. The reason why the disease has not come on when no other means have been used than those falsely called preventives, is simply because the *poison* was either rubbed from the teeth of the animal by the clothing, or from some other cause did not happen to be deposited in the wound.

A case of hydrophobia occurred not long since in Lancaster county, Pa. The patient, after being bitten by a mad dog, used no other means to prevent the disease than a preparation that was supposed to be a certain preventive to the disease. Poison, however, happened to be deposited in the wound, and being allowed to remain there, it was absorbed, and by contaminating the system, brought on hydrophobia, of which the patient died.

Means to be employed to prevent Hydrophobia.—Any one on being bitten by a mad dog, or other rabid animal, should immediately have the wound washed with cold water, and then, as soon as possible, have the surrounding flesh pared away, as deeply as the wound had penetrated, or sear the whole of the wound with a red-hot iron, or with caustic potash, in order to remove or destroy the poison. The sooner the parts are cut away, or cauterized, after the bite, the more certainly will it prevent hydrophobia. If this should have been neglected at first, even for several days after the bite, it should still be done. Doctor Marshall Hall on the treatment of hydrophobia makes the following observations: "But the most important point in practice is to excise the part on which the bite has been inflicted, early, nay immediately, if possible, but late rather than not at all: indeed it is not too late if the symptoms have not yet appeared."

Besides the local treatment above mentioned, constitutional

treatment should at once be instituted, with a view to assist the constitution to expel the poison from the system, in case there should be a portion of it absorbed. A course of medicine must be administered every few days, and the patient take broken doses of lobelia; drink skull-cap tea; keep the bowels regular by the use of injections; have a vapour bath administered every day, and use light nourishing food. When the above preventive measures are early employed, there would be scarcely the possibility of the occurrence of hydrophobia.

Symptoms of Hydrophobia.—"The only symptom which is never wholly absent in this disease, as it affects the human species, is the extraordinary dread or horror of liquids—more especially of water. Patients labouring under rabies, may indeed sometimes experience a temporary abatement, or even absence of this torturing symptom, but in all instances it occurs in a greater or less degree, and generally remains throughout the whole course of the malady. In general the mere sight of liquids, or the sound of pouring water from one vessel to another, brings on violent suffocative spasms; and the attempt to swallow water, or to bring it to the lips, commonly excites a degree of horror and agitation truly frightful. Even the sight of polished surfaces, as of a mirror, or the rustling sound of bed curtains, or of running water, will in the more violent grades of the disease, immediately renew the spasms and feeling of horror. Occasionally, however, this extraordinary horror is only manifested against *water;* for patients have been known to take small quantities of other fluids, as of soups, milk, and wine, in a lukewarm state. The thirst is always extremely urgent, and although the suffering from this source is generally very great, the patient does not attempt to swallow any liquids. The secretion of saliva is profuse, and from an inability to swallow it, the patient continually spits it out in every direction, often desiring those around him to stand aside, as conscious that he might thereby injure them. During the whole course of the disease occasional remissions occur. Whilst these continue, the patient often appears calm, talks deliberately about his feelings or his affairs, and cautions those about him not to approach him too closely when under the paroxysm of madness, lest he should injure them. Notwithstanding this partial calm, there is always a peculiar wildness and appearance of alarm in the expression of the countenance; the motions are quick and hurried; the eyes cast about with an air of suspicion; and if the patient attempt to lie down and obtain some rest, he usually soon starts up again with great agitation and anguish of feeling. During the exacerbations, the expression of the countenance is wild, furious, agitated, and agonizing; the eyes are blood-shot, sparkling, projecting, and expressive of rage and terror; the muscles of the face, throat, and

chest, and sometimes of the extremities, are thrown into spasms; respiration is interrupted or convulsive; the arms are thrown about; the fists clenched; the teeth violently gnashed; the mouth foaming; with an unconquerable disposition to bite every thing that comes within the patient's reach. In violent paroxysms furious and maniacal ravings occur, attended often with an entire absence of consciousness. These paroxysms usually last from about fifteen to thirty minutes."

There is seldom any fever in hydrophobia, except sometimes in the later period of the disease. The pulse is generally natural, except towards the termination of the disease, when it becomes quick, irregular, and weak. The countenance is pale, except during the paroxysms,—then the face is turgid and flushed. The power of generating heat in the system is almost suspended, the patient being extremely sensitive to cold and shudders at the slightest gust of air. The skin is dry and constricted, the bowels inactive, "and the blood drawn from a vein is often dissolved and very fluid."

Duration of the Disease.—Hydrophobia, in most instances, terminates fatally by the second or third day from its commencement. It has, however, occasionally been protracted to the fourteenth or fifteenth day.

Treatment.—When symptoms of approaching hydrophobia appear, such as, spasms in the throat, and a dread of water, prompt and energetic treatment must at once be instituted. The vapour bath, and preparations of lobelia are the means chiefly to be relied upon.

Third Preparation of Lobelia.—This must be given in tablespoonful doses, and frequently repeated. Injections composed of two or three teaspoonsful of lobelia powder in lukewarm water must be administered and retained, with a view to relax the system and equalize the nervous influence. This form of injection should be repeated so as to cause the system to be continually relaxed. A tablespoonful of the third preparation of lobelia may be occasionally added to the injection, for the purpose of stimulating the peristaltic action of the bowels, and to aid the curative efforts of the constitution to resist the disease. When the patient cannot swallow liquids, *injections* are to be chiefly relied upon. Especial care will be necessary to protect the patient from the influence of cold air.

The Vapour Bath.—From experiments that have been made in France, the vapour bath promises to be the most effectual means

for the cure of hydrophobia that has ever yet been tried by the medical profession. A physician in France by the name of Buisson, who, on being attacked with symptoms of hydrophobia, went into a vapour bath at the temperature of 140°, and after remaining there some time, all the symptoms of hydrophobia left him, and he came out of the bath entirely cured. This took place in the first onset of the disease,—the only time, probably, when this or any other remedy will prove successful. M. Buisson, in a paper which he read before the Paris Academy of Arts and Sciences, wherein he details his own case, asserts also that he had, since this experiment upon himself, treated eighty cases of persons bitten by mad dogs, and succeeded by the use of vapour baths, in curing or preventing the disease in every case, except that of a child who died during the treatment.

There cannot be a doubt that the vapour bath is the most effectual means of removing poison from the blood. The bath should therefore be early and perseveringly applied, keeping the patient in as long as it can be borne, which, in some instances, will be several hours. The temperature of the bath should be as high as the patient can bear. About the time the patient is to leave the bath, a full dose of the third preparation of lobelia should be given. The bath must be repeated at frequent intervals, say every few hours, as long as it promises any hope of being successful.

SECTION XII.

NEURALGIA—TIC DOULOUREUX.

Symptoms.—This form of disease is characterized by a succession of darting pains, which come on and pass away with the suddenness of an electric shock, shooting along the course of the affected nerve. "It comes on in sudden paroxysms, with longer or shorter intervals of more or less complete freedom from suffering. In general, much pain is experienced throughout the whole course of the paroxysm, with frequent transitory shocks of darting pain, so extremely agonizing as often to cause a temporary loss of reason and consciousness." When the disease is seated about the head or face, the surrounding parts, during the paroxysms of pain, are extremely tender, and usually somewhat swollen; the slightest touch suddenly causing severe darting pain. "In very violent attacks of the disease, we generally find the neighbouring muscles affected with spasms, and occasionally spasmodic twitchings occur

in the muscles of parts distant from the place where the pain is located. When the disease occurs in the nerves of the face, the saliva is often secreted very copiously, and in nearly all instances of this kind, there is a profuse flow of tears from the eyes during the paroxysm."

It frequently happens in recent attacks of the disease, that the paroxysms come on at a particular hour of the day, preceded by coldness of the extremities, and sometimes chilliness; observing as much regularity with regard to the time of its coming on and passing away by perspiration, as regular intermitting fever or ague; the patient, during the interval between the paroxysms being quite free from pain.

Of its Location.—Neuralgia is most apt to attack the nerves of the face and jaws; still, any portion of the nervous system is liable to be diseased in this way.

The optic nerve has occasionally been affected with neuralgia, the pain being described by the patient, as severe as if a red-hot needle were passed through the centre of the eye.

The nerves of the extremities are liable to neuralgia, the parts becoming suddenly swollen and inflamed, and shifting about from one part to another, so that a part that is extremely painful, tender, and inflamed one day, may be entirely free from pain or soreness on the following one, another part having become affected. This form of disease is generally called flying rheumatism. It is of no importance in practice to know whether the disease be neuralgia, or rheumatism, as the constitutional treatment is to be conducted upon the same principles in both forms of disease. When the great sciatic nerve that passes through the hip near the head of the thigh bone is affected, it is called, *sciatica*, or *sciatic pain*. Many persons experience neuralgic pains in the breast, and sometimes extending to the arms, the disease consisting in a weakened condition of the spinal marrow, generally occasioned by a derangement of the digestive functions.

Neuralgia is frequently unattended with inflammation or swelling. Indeed in many instances the parts affected are colder than natural.

Causes.—Neuralgia is in the majority of instances occasioned by taking cold, or from other causes by which the stomach and bowels are disordered. Frequently, however, it is produced by local causes, such as decayed teeth, wounds of the scalp, and injury of a nerve.

Case.—Mrs. R——, of Southwark, struck her forehead about the middle of the eyebrow, against the corner of a stove door. Shortly after the accident she was seized with violent pains in the

part, and shooting over that side of the head, it became swollen, and evidently larger than the opposite side. On taking cold, or when the system became disordered from any cause, the patient was apt to have violent paroxysms of darting pain in the side of the head, which was generally relieved by a sweat and emetic. The disease continucd to return at intervals during a period of two years. A singular circumstance connected with this case, was, that the teeth of the upper jaw of the affected side became entirely encased with tartar, excepting their crowns.

Case.—Miss ——, of New Jersey, had been subject to frequent attacks of neuralgia in one side of her face during a period of eighteen months, accompanied with loss of digestion and continued painful diarrhœa. This patient experienced scarcely any benefit from medical treatment until she had some decayed teeth extracted from the upper jaw of the affected side, upon which the pains ceased, and her general health was restored.

Treatment.—There are few cases of neuralgia in which the stomach and bowels are not prominently disordered in the first stages of the disease, requiring the employment of emetics to cleanse the stomach, and the use of stimulants and external warmth, to promote perspiration.

Of the Vapour Bath.—Whether the disease be of recent occurrence, or of long continuance, the use of the vapour bath is particularly appropriate. There are probably few physicians who have used the vapour bath extensively in neuralgia that have not sometimes found it to cure the disease, after every other remedy had failed. In the treatment of neuralgia, it is of the greatest importance to bring on perspiration, and favour its continuance by the application of external warmth, together with the use of pure stimulants internally.

After a vapour bath, the affected parts should be anointed with the stimulating liniment, or other stimulating preparations applied: No. 6, third preparation of lobelia, or Granville's Lotion.

Emetics are peculiarly beneficial in all recent cases, and whenever the disease is occasioned by constitutional disorder, attended with a feverish state of the system, I have repeatedly observed immediate and complete relief afforded by the operation of an emetic.

Even when tic douloureux is produced by local causes, such as decayed teeth, or injuries of the head, emetics, especially when preceded by the vapour bath, will prove the most effectual, and sometimes the only means of relief, until the decayed teeth are removed.

Injections are beneficial when the disease is fixed about the head, accompanied with a determination of blood to the head, and coldness of the feet. Cases of this kind may, very generally, be relieved by placing the feet in warm water, and employing a stimulating injection to relieve the bowels, followed by one composed of lobelia powder and warm water, and retained with a view to relax the system, and equalize the circulation.

Stimulants.—When the attack is violent and protracted, besides the use of emetics, and the vapour bath, the patient should take freely of capsicum or composition, together with broken doses of lobelia.

Compound Lobelia Pills.—When the disease has become deeply seated, requiring a long course of treatment, the above pills may be substituted for other stimulants, and the No. 3 pills may be used as anti-canker medicine.

Salt and Brandy has been used with great benefit in some cases of neuralgia. It appears to be best suited to chronic cases and where the system is in a cold and torpid condition. The dose is a tablespoonful once or twice a day.

Tonics.—In cases where the system is relaxed and debilitated, bitters are to be employed. There are many vegetable tonics that may be used either singly or compounded.

When the disease occurs periodically, like ordinary ague, the patient being free from pain during the interval between the paroxysms, the case should be treated precisely as a case of intermitting fever or ague: first by cleansing the stomach, and using freely of pure stimulants until the tongue begins to clean, and the secretions of the skin and mucous membrane are restored; and then give freely of tonics, of which Peruvian bark or quinine are the most efficient.

Quinine.—After the stomach has been cleaned by a course of medicine; and in cases unattended by fever, and more especially, when the neuralgia comes on periodically, there is no remedy upon which so much reliance can be placed, as quinine. This remedy has been employed, with remarkable success of late, succeeding in curing many cases of an obstinate character. It may be given in large doses,—from ten to thirty grains, are frequently given at a time, or it may be given in small doses frequently repeated. In cases where the system is in a cold torpid condition, quinine may be given freely, without any preparatory treatment; if the neuralgia comes on at a certain time of the day, the quinine should be taken an hour or two before the time.

In neuralgia of the extremities, usually termed flying rheumatism, besides the constitutional treatment already described, benefit may be derived by stimulating applications along the course of the spine, stimulating liniment, mustard plasters, or pepper poultices.

For "ague in the face," which is only another name for neuralgia, Dr. Thomson recommends a portion of cayenne pepper wrapped in gauze or book muslin wet with No. 6, and applied between the cheek and the jaw of the affected side. This will cause the secretions to flow freely, and relieve the pain. I attended an old lady in Southwark, who had a severe attack of neuralgia in the lower jaw, who experienced relief by keeping a portion of the liquid of the third preparation of lobelia in the mouth. The greatest benefit, however, was derived from the use of stimulating injections containing a portion of lobelia, together with the vapour bath, and by the system being kept slightly relaxed by broken doses of lobelia.

When neuralgia is brought on by decayed teeth, they must be removed before a permanent cure can be looked for. It is not a proper time to extract teeth during a paroxysm of pain, more especially if the jaw should be swollen and inflamed.

In *sciatic*, (neuralgia in the hip,) besides the "*course of medicine*," and general constitutional treatment already described, benefit may be obtained by the internal use of the *oil of turpentine*. A teaspoonful may be taken three times a day before meals. It may be taken mixed with a small portion of honey, or rubbed up with a teaspoonful of sugar, and then adding a little water.

Neuralgia of the Stomach is characterized by severe pain at the pit of the stomach, which often darts into the breast and to the spine, and is "rather relieved than aggravated by pressure." The pain is often relieved by taking a full meal, or a draught of stimulating drink. The tongue is covered with a white fur; the appetite variable, sometimes natural, at others craving, and then again extremely indifferent. There is an abundant flow of saliva; absence of thirst; and often repugnance to liquids. The pain which is relieved by eating, is apt to return in a few hours after meals, accompanied with a feeling of weight at the stomach; harassing belchings, and extreme depression of mind. In severe cases "the patient sometimes experiences difficulty of breathing, palpitations of the heart, wandering pains and peculiar sensations of coldness, especially in the arms, loins, and lower extremities. The sleep is sometimes good, sometimes agitated, and sometimes the patient is unable to sleep at all: yet in the morning the patient gets up refreshed, and feels quite well, till breakfast renews the suffering."

Many of the symptoms attending neuralgia of the stomach, are

such as frequently accompany ordinary dyspepsia, so that it may be difficult to determine whether the disease be ordinary dyspepsia, or neuralgia. The same general plan of treatment, however, will be suited to each form of disease, varying the remedies to suit the emergency of the case. When the symptoms are very distressing, a course of medicine will be proper, more especially when the distress comes on after meals. A teaspoonful of the tincture of lobelia, taken in a tablespoonful of warm water, or mint tea, will seldom fail of relieving neuralgic pains in the stomach. It may be necessary, however, to repeat the dose. "I have myself," says Dr. Eberle, "suffered much from this complaint, (neuralgia of the stomach,) and have taken opium in large doses; but I have found another remedy, which is less ruinous in its consequences, and far more permanent in its good effects, than this narcoctic. This remedy is the saturated tincture of *lobelia inflata;* a few tablespoonsful of which has never failed to give me speedy relief and to procure me long intervals of exemption from the disease. I have also," says the Doctor, "used it in a case of a gentleman in this city, with the happiest effect, but further than this my experience in the use of this article does not go."

Stimulating Liniments, and various volatile lotions, may be applied externally with much advantage in cases of neuralgia.

Gum Elastic.—Sheet gum elastic is well adapted to the cure of neuralgia, when the disease is seated in parts that will admit of the sheet gum being applied. It may be applied to joints affected with rheumatism with much benefit.

In sciatica, besides the general constitutional treatment before mentioned, anoint the hip with stimulating ointment, or third preparation of lobelia and apply the sheet gum elastic.

Sea bathing and travelling, will sometimes cure neuralgia where medicines have failed to do it.

CHAPTER X.

SECTION I.

DROPSY.

Dropsy is an unnatural accumulation of fluid in one or more of the cavities of the body, or in the cellular tissue, interposed between the skin and flesh.

Classification of Dropsy.—1st. *Ascitis*,—When the fluid is collected in the cavity of the abdomen.

2d. *Hydrothorax*,—When the effusion takes place in the cavity of the chest.

3d. *Anasarca*,—Dropsy in the cellular tissue.

4th. *Hydrophalis*,—Dropsy in the head.

5th. *Hydrocele*,—Dropsy of the scrotum.

In many instances dropsical effusions take place in various parts of the body at the same time. Thus in some patients there are ascitis, hydrothorax, and anasarca, all at once.

General Causes of Dropsy.—These are, "obstructions to the flow of venous blood," arising from disease of the liver, heart, or lungs: excessive loss of blood; disease of the kidneys; debility, especially after scarlet fever and measles; chronic diarrhœa; the use of arsenic; purging with drastic cathartics; or the abuse of mercury. In marshy districts of country, dropsy often succeds imperfectly cured ague. Exposure to wet and cold frequently causes dropsy in those predisposed to this form of disease.

In a great majority of cases, dropsy comes on gradually; yet, in some instances the dropsical condition has been experienced very suddenly. Professor Chapman mentions the case of a gentleman from Virginia who, by plunging into a cold bath, the body being at the same time greatly fatigued and in a free perspiration from severe exercise, brought on a dropsical effusion in a few hours after. Another gentleman from South Carolina went into a very hot water bath, after a fatiguing ride on horseback one very hot day, and dropsy supervened soon after. In another instance, dropsy was suddenly produced by a person lying down on the ice,

who was much fatigued by skating. He was seized with cold which was followed in a few days by dropsy.

The General Symptoms of Constitutional Disorder attending Dropsy, are languor and lassitude; paleness of countenance; a dry and husky skin, without any tendency to perspiration; general coldness and torpor of the system; scanty and high-coloured urine; constipation of the bowels, or the stools of an unnatural appearance; and the appetite variable, yet generally impaired.

Dropsy is the effect of an obstruction in some important organ, or of general debility and derangement throughout the system.

ASCITIS.

1. *Dropsy in the cavity of the Abdomen.*—Dropsy in the cavity of the abdomen is generally associated with an extensively diseased liver or spleen, occasioned, in most instances, either by drunkenness, long-continued agues, or inveterate dyspepsia. Dropsy, however, being the effect of previous disease and debility, may therefore be produced by almost any debilitating influence, such as cold and dampness, a sudden check to perspiration, confinement in foul air, or the use of unwholesome food.

Pregnancy, and tumours in the cavity of the abdomen, have, in some instances, been mistaken for dropsy. A collection of water in the cavity of the belly, however, may be very readily distinguished from a tumour, or from pregnancy. One of the surest means for ascertaining the presence of water, is by placing the palm of the hand on one side of the belly, and with the other hand to tap lightly on the opposite side, which will cause a distinct *fluctuation* or *wave* to be felt by the hand placed on the abdomen, provided there be a collection of fluid within. In dropsy the swelling is uniform on both sides of the abdomen, and when the patient lies on the back, the liquids will press out the sides and flatten the middle; whereas, in pregnancy or tumours, there is usually more swelling in one side, and the form of the swelling is but slightly altered by lying on the back. A collection of water in the cavity of the abdomen will occasion difficulty of breathing, from the pressure of the fluid upon the diaphragm, when the patient lies down with the hips raised higher than the chest. Dropsy is attended with symptoms of constitutional disorder, which are mostly absent in pregnancy.

Dropsy of the abdomen has been cured in many instances by the Thomsonian practice, when other plans of treatment have failed.

HYDROTHORAX.

2. *Dropsy in the Chest.*—Dropsy in the chest, like other forms of dropsy, is the consequence of a disordered condition of the general system, or from obstruction in some important organ. In this form of dropsy, patients seldom experience much inconvenience from it, until the accumulation of water becomes so great as to interfere with respiration. The dropsy may take place only in one side of the chest, yet more commonly, the effusion occurs in both sides.

Distinguishing Symptoms.—These are, a dull sound produced by percussion, (tapping on the chest with the ends of the fingers,) whilst the patient is in a sitting posture. Great difficulty of breathing produced by pressing firmly upon the abdomen, just below the ribs, which, by forcing up the diaphragm, causes the water to rise in the chest, and thus it interferes with respiration. A sense of suffocation on lying down; "starting during sleep;" great agitation; and an habitual cough.

The symptoms above mentioned, however, may attend other forms of disease, without there being an accumulation of water in the chest. Thus asthma and disease of the heart may occasion the same oppression of breathing that occurs in dropsy of the chest. The same difficulty of lying down attends asthma as in dropsy of the chest. Asthma, however, usually comes on by paroxysms, whereas in dropsy of the chest the oppression of breathing and inability to lie with the breast low continues without intermission. If, together with the symptoms before mentioned, characterizing dropsy of the chest, there be a tendency to dropsy in other parts, as in the feet, and beneath the skin covering the chest, sufficient evidence will be afforded to warrant the conclusion that there is water in the chest; and although it may be difficult to determine whether the disease be dropsy, asthma, or disease of the heart, it should occasion no embarrassment to the practitioner in directing the treatment, for the same general plan of treatment will be equally appropriate to each case. Thus the vapour bath which will relieve asthma, will prove beneficial in dropsy, wherever it may be located. Lobelia, which is the most effectual remedy for asthma, is the article chiefly to be relied upon, both in dropsy of the chest, and disease of the heart.

In dropsy of the chest or abdomen, a sudden subsidence of the swelling in the legs and feet, without an increased secretion of urine, is to be viewed as an unfavourable symptom.

ANASARCA.

3. *Cellular Dropsy.*—This form of dropsy generally commences in the feet, and the swelling ascends, and in some cases extends over the whole surface of the body. Sometimes the swelling will be confined to the legs and feet; or to the face, hands, and feet.

Pressing a finger firmly against the swelling, will leave an indentation or pit, which will remain a considerable length of time after the pressure has been removed. This serves to distinguish cellular dropsy from swellings arising from other causes. Thus milk-swelling, as it is termed, has the appearance of dropsy, but pressing a finger upon it, will not leave such indentations as remain after pressure upon dropsical swellings.

General Causes.—Cellular dropsy is peculiarly liable to occur from exposure to cold after *scarlet fever* and *measles*. Females are liable to dropsy of the lower limbs during the later period of pregnancy, in consequence of pressure upon the veins, thus obstructing the circulation. Extreme exhaustion from loss of blood; "exposure to cold when the system is under the influence of mercury; the long-continued use of arsenic;" chronic diarrhœa; "repelled cutaneous eruptions; great debility and exhaustion; chronic gout; organic disease of the kidneys, and disease of the heart are the most common causes of this variety of dropsy.

Treatment of Dropsy in General.—The most important indication for the cure of dropsy of every variety, is to correct the disordered condition that causes it. In many instances, however, dropsy is an effect of an organic disease of some important organ, and extremely difficult of cure.

An occasional *course of medicine* is the most effectual means to restore a healthy action throughout the system, and it will be required in most cases of dropsy. As a general rule the course should be repeated more frequently in the early stage of dropsy than when it has been of long standing.

Of the Course of Medicine.—1st. *The Vapour Bath.*—This fulfils important indications in the treatment of dropsy. It improves the condition of the skin—effects a determination to the surface—excites free perspiration—diffuses a natural warmth through the system, and by augmenting sensibility, causes the emetic to operate more effectually. It is an observation of Dr. Thomson's, that one emetic after steaming will prove as effectual in removing dis-

ease, as four emetics given without the bath. A vapour bath in the evening will enable a patient to rest more comfortably through the night. Dropsical swellings of the limbs that occur after scarlet fever and measles, may be effectually removed in many instances by the use of vapour baths, together with giving a dose of composition powder three or four times a day.

2d. *The Emetic.*—The most decided benefit is derived from the frequent administration of emetics, more especially in the early period of dropsy. Cases of dropsy have been cured by spontaneous vomiting. Dr. Eberle mentions a case of dropsy of the abdomen cured by spontaneous protracted vomiting. The relaxation produced by the lobelia, together with the retching and straining effort to vomit, will in some instances, overcome obstructions in the liver and other organs. In the early period of the disease, and more particularly if fever exist, the system should be relaxed by a free use of the lobelia. An injection of lobelia powder in lukewarm water, retained, will assist in relaxing the system, and will also favour the operation of the emetic. Patients sometimes experience much distress during the operation of an emetic, in deeply seated complaints, but realize great benefit after the operation, from its effect.

3d. *Injections.*—If the bowels be costive, an injection should be administered previously to the bath. Stimulating injections, containing a portion of lobelia, exert a beneficial influence, by arousing the nervous energy, and thus give an additional impulse to the circulation of the blood, and an increased action to the absorbent vessels. The kidneys may also be stimulated to increased action by injections. To favour the operation of the medicine, the patient must be kept warm, and take freely of capsicum, or composition tea.

Compound Lobelia Pills.—There is probably no medicine or compound that will fulfil so many indications, for the cure of dropsy in general as these pills. From one to four or five pills may be given every hour or two, regulating the quantity taken by the effect produced. The free use of these pills, and occasionally a course of medicine, are the means most to be relied upon in the treatment of dropsy. If the bowels be very costive, a small portion of bitter root may be added to the pills. Not in sufficient quantity, however, to occasion purging.

4th. *A Vapour Bath*, after the emetic, completes the course of medicine. The patient should be allowed to remain in bed after the operation of the emetic, as long as he continues in a perspiration. When perspiration ceases, the second bath may be applied; and the patient showered with cold water, or washed with spirits,

rubbed dry, and the surface bathed with some stimulant, such as No. 6, pepper sauce, or stimulating liniment. After this the patient must be kept warm, either in bed or by being warmly clad, and continue the use of stimulating medicines, to "support the internal heat," and maintain a determination to the surface. Where perspiration cannot be continued, or an increase in the secretion of urine be induced, the use of the usual stimulants, capsicum or composition tea will be required. The medicine must be given chiefly in the form of pills, or the powders taken dry, or in a very small quantity of water. The compound lobelia pills answer both as a stimulant and relaxant, and they should be taken in sufficient quantity to occasion a slight and continued nausea.

Nervines.—Skullcap or valerian tea, may be used at night to promote sleep, or they may be taken with other medicine.

Diuretics.—In certain conditions of the system, the use of diuretic medicine will be beneficial, by increasing the secretion of urine, which is among the first symptoms indicating a favourable termination of dropsy. But where the loss of power in the kidneys depends upon a great degree of constitutional derangement, it will be useless to rely upon diuretics to cure the dropsy. First resort to general constitutional treatment, and as the health improves, diuretics will be beneficial. A great variety of diuretics are employed in the treatment of dropsy. The following, I am informed, was a favourite remedy of the late Dr. Parrish.

Take parsley root, English mustard seed, horse radish, and burdock root, bruised or grated, put them into a stone jug with a proper portion of sound cider, to be taken several times a day. If this should increase the flow of urine without occasioning unpleasant feelings in the stomach, it should be continued as long as it is found to be agreeable.

A strong tea of the *sumac*, more especially of the *roots* and *berries*, answers in some instances as a *diuretic*, besides the important indication which it fulfils of cleansing the stomach and bowels of "*canker.*"

Harlæm Oil has been used with surprising effect, in some cases of dropsy. The dose for an adult is twenty drops, taken in a tablespoonful of boiled milk, and repeated three or four times a day.

Scabious, (*Erigeron Philadelpheum,*) may be used in decoction with advantage, in cases accompanied with difficulty of passing urine.

Wild Lettuce, (*Pyrola Rotundifolia,*) is recommended by Sa-

muel Thomson as a good remedy in mild cases of dropsy. The tops and roots to be pounded, or bruised, and steeped in boiling water, and the tea drank freely. It may be sweetened with honey.

Juniper.—The oil of juniper, or a tea of juniper berries, is used to promote the flow of urine.

It must be borne in mind, however, that diuretics are not to be relied upon for the cure of dropsy, but to be employed as auxiliary remedies.

Tapping.—In many cases of dropsy of the belly, it becomes necessary to drain off the water by tapping. This, though a very easy and safe operation, requires to be done by one acquainted with the operation. I shall, therefore, not attempt to give directions for performing it, but merely observe, that I have found a thumb lancet the best instrument for tapping in dropsy; a canula closed at the end and perforated with holes to admit the escape of the fluid, is to be inserted when the lancet is withdrawn. With a lancet in good order, the operation of tapping does not occasion more pain to the patient than is caused by bleeding in the arm. The *trochar* (the instrument generally employed for tapping,) has no advantage whatever over the lancet, and with the latter the operation can be performed with much less difficulty, and with one-tenth of the pain to the patient that would be caused by the introduction of the trochar. In some instances the operation of tapping requires to be several times repeated. There are cases recorded where the operation has been performed more than one hundred times in the same patient. Even in cases where there is no probability of a cure being effected, the operation of tapping will frequently be called for as the only means of relief to the patient.

Puncturing the Legs.—In dropsy of the chest where the water gravitates to the feet and legs, relief may be afforded by having the patient sit with his legs hanging down, and when the water settles in them to puncture the skin in many places with the point of a lancet or needle, and thus allow the water to run off. This operation may be repeated as often as required.

Tonics.—When the disease has been of long standing, the stronger kinds of tonics should be used, more especially after a few courses of medicine have been administered. A strong tea of quassia, wormwood, balmony, or golden seal, may be taken once or twice a day.

External application.—Bandaging the swollen parts, more especially the legs and abdomen will be beneficial; and after tapping, the use of a bandage becomes indispensable. Before applying the

bandage, the stimulating liniment, No. 6, or pepper sauce must be applied to the skin; or the bandage must be wet with strong salt water, and dried before it be applied. Frictions of the surface with a salted towel or flesh brush will be of more or less benefit.

Dr. Thomson in his Narrative makes mention of several cases of dropsy, in which he succeeded in effecting a cure, after the regular practice had failed, and the disease had been considered as incurable. He treated them upon his general plan of giving freely of the "*hot medicine to support internal heat*," and to continue perspiration, assisted by external warmth, and occasionally by a course of medicine. And in dropsy of the abdomen, he drew off the water by tapping, in the usual way, after passing the patient through several courses of medicine, in order to retore a more healthy action in the system, and thus lessen the liability to a return of the dropsy.

The character of the fluid drawn off by tapping varies in different cases. Sometimes it will be high-coloured like strong coffee, or it may be thick and ropy; more frequently, however, it resembles ordinary urine.

The remedies generally employed in the old school practice in dropsy, such as digitalis and hydrogogue cathartics are worse than useless; for notwithstanding they may lessen the amount of the dropsical fluid, they directly tend to prostrate the digestive functions and necessarily weaken the restorative powers of the constitution. There is probably no case of dropsy cured under the treatment pursued by the medical profession, but would be more readily and permanently cured under the Thomsonian treatment. *Elaterium*, or the squirting cucumber is extensively employed in dropsy as a cathartic by the medical profession; but its direct tendency upon the constitution is to prostrate the digestive functions.

5th. *Hydrocele, or dropsy of the scrotum.*—When this occurs in infants, as it sometimes does at birth, it is called *congenital hydrocele.* It may be distinguished from hernia, by the transparency of the parts, and the absence of slight vermicular motions. It is generally readily cured in infants and children, by applying some mild stimulant, the scrotum being kept in a suspensary bag, by which moderate pressure upon the parts is maintained.

Hydrocele in adults, frequently demands the operation of tapping the scrotum. From a tendency to a reaccumulation of the water, the operation will require to be repeated many times, in some cases, before a cure takes place. The late Dr. Physic relied almost exclusively on tapping for the cure of hydrocele, repeating the operation until the water ceased to accumulate.

HYDROCEPHALUS.

6th. *Dropsy in the Brain.*—Effusion of water in the brain rarely occurs except in children, between two and five years of age.

Symptoms.—Pain in the head, especially across the brows, or in the back of the neck; constant motion of one or both hands; sickness and efforts to vomit; a disposition to be in a lying posture; a deranged condition of the bowels; an eruption on the face, resembling very minute drops of water. Stupor and sometimes convulsions, attend dropsy of the brain.

The above symptoms usually accompany hydrocephalus. Precisely the same group of symptoms occur, however, without there being any effusion of water on the brain. Dr. Chapman recently attended in consultation on a case, where there was every characteristic symptom of dropsy of the brain, but on examination after death, there was no appearance of water in that organ.

Causes.—An originally feeble constitution; exhaustion from disease; exposure to wet and cold; together with the reducing plan of treatment practised by the medical profession, constitute the principal source of dropsy of the brain. Severe attacks of diarrhœa or infantile cholera, are frequently attended with effusion of water in the brain; the dropsy being merely a *link* in the chain of effects resulting from loss of vital power. Active purging, when the system is in a state of exhaustion, may occasion symptoms indicative of hydrocephalus.

Dr. Travers, who in reputation is excelled by few in the profession, advances the opinion, that the depletive treatment pursued by the profession, occasions, in many instances, those symptoms indicative of dropsy in the brain, so frequently observed in children.

A physician discovers symptoms of inflammation in the head, and adopts a depletive course of treatment under the false impression that the inflammation is the source of danger. A child is taken, for instance, with cholera morbus, and the purging and vomiting continuing for some time, the brain consequently becomes exhausted, and nature sets up her restorative action, occasioning symptoms of inflammation of the brain. This feverish or inflammatory action is the means which nature employs to restore the lost vitality of the brain, and to sustain its functions, and these curative efforts should be aided instead of being prostrated by a depletive course of treatment. Where the pulse is strong, and the skin hot, the chances of a cure are much greater than when there is general torpor and a cold skin.

Treatment of Dropsy in the Brain.—The existence of dropsy in the brain cannot be determined to a certainty, as the symptoms which attend collections of water in the brain also accompany an inflammatory action in it. Precisely the same symptoms also arise from determinations of blood to the head from exhaustion of strength. The treatment, however, applicable to one case, will be

equally suited to a similar condition of the general system in the others. The treatment must be directed to assist the efforts of nature. The means to be employed are, injections, the vapour bath, emetics, the warm foot bath, volatile stimulants applied to the head, such as whiskey or vinegar; together with frequent doses of stimulants, which may be rendered more efficacious by the addition of small portions of lobelia.

Sometimes an oppressed stomach will occasion symptoms resembling those arising from inflammation of the brain, and be entirely relieved by the operation of an emetic. Even though there should not be foul matter burdening the stomach, still a lobelia emetic may prove beneficial, more especially if there be fever.

Where there is an active determination of blood to the brain accompanied by fever, the system must be kept under the influence of lobelia in broken doses, taken into the stomach, or administered by injection to the bowels, with a view to relax the capillary vessels, and cause the blood to circulate more equally through the system. Although an inflammatory action be necessary to the lost vitality of the brain, still there may be an undue determination of blood, and concentration of nervous influence to the head, which may require to be regulated by the means above mentioned, together with the use of the vapour bath, foot bath, pepper poultices or mustard plasters to the feet, and cooling applications to the head. The strength is to be supported by the use of stimulants usually employed, and by a light nourishing diet. In fine, inflammation, dropsy, and all other disorders of the brain, arising from constitutional disease, are to be treated upon the same general principles.

Symptoms denoting a recovery.—A heavy sediment in the urine, or if it have a fœtid smell, the pulse softening, *and a running from the nose*. This last, denoting the restoration of the secretions of the nose, is to be depended upon more than any other symptoms, as indicative of a recovery from dropsy of the brain.

Bad Symptoms.—Blindness or deafness, deep stupor, spasms, a copious discharge of pale urine, watery discharge from the bowels, and twitchings of the muscles are symptoms which indicate an unfavourable termination of the case.

CHAPTER XI.

SECTION I.

SCROFULA.

The name scrofula is applied to forms of disease differing materially in their general aspect. Thus, a child afflicted with sore eyes is said to be scrofulous; another has an eruption on the skin which is called scrofula; a third will have a disease in the hip, which receives the name of scrofula; whilst a fourth has swellings in the glands of the neck, also called scrofula. These are forms of disease which are apt to occur in persons of delicate and feeble constitutions, generally termed *scrofulous*.

Children possessing what is called the scrofulous constitution are usually of small frame, with pale and delicate skin; the muscles imperfectly developed, the flesh being soft and flaccid, with light hair, blue or gray eyes, long eye-lashes and large upper lip. The head (particularly the posterior part) is usually large, and the temples flattened or somewhat depressed. There is, in general, a great proneness to slight catarrhal affections, during which, the wings of the nose and the upper lip are apt to become swollen. The edges of the eye-lids are much disposed to become inflamed, and when the scrofulous tendency is strongly developed, the tarsi (under edge of the eye-lids) "are constantly red and tender." The digestive powers are feeble, the appetite variable, and the bowels seldom in a healthy condition. The patient is very sensitive to cold, and his temper generally irritable. The intellectual powers are usually very strong.

In female children of scrofulous constitutions, "a leucorrhœal discharge is apt to occur from time to time; and in very young children, excoriations behind the ears, scabby eruptions about the head, and lips," and sore eyes are frequently observed.

It very often happens that children exhibit a strong tendency to scrofula, but become healthy without the disease having ever become further developed, except occasionally by slight swellings in the glands about the neck. Sometimes the disease breaks out early in life, and in others it does not appear until after the age of puberty. In some the disease is of short duration, the patient soon becoming entirely healthy; in others the constitution sinks under the ravages of the disease, and the case terminates fatally, most commonly by

tubercular consumption. Occasionally the disease breaks out in childhood, and continues for years, or even during a long life, the patient enjoying tolerably good health with the exception of swelling of the glands about the neck, and probably more or less discharge of matter from those that have suppurated; or if the disease be located in the hip, the patient may recover, except from the lameness and deformity which almost always follows as a consequence of the hip disease.

Causes.—Although scrofula is far more likely to occur in children of a peculiar delicacy of constitution, still it is occasionally observed in those who have inherited sound constitutions. The disease essentially consists in debility and obstruction in the glands; and the same cause, for instance, exposure to cold, producing obstructions in the glands of one of a scrofulous constitution, may, by frequent repetition, together with unwholesome diet and confinement in close apartments, occasion the disease in one of a naturally good constitution.

Children are especially liable to slight swelling of the glands under the jaw and on the neck, during teething, and when they have eruptions behind the ears or on the head. Arising from such causes, these slight enlargements of the glands almost always pass away without any attending serious consequences.

"A cold, humid, and variable atmosphere, more especially when aided by deficient nourishment, appears to have a strong tendency to favour the development of the scrofulous habit." Children who work in the large cotton and woollen manufactories of England are peculiarly liable to scrofula. The disease also prevails among the children of the poor, when they are badly clothed, sleep in small close rooms, and who live on unwholesome food, badly cooked.

Scrofula frequently occurs as a consequence of taking cold after measles, scarlet fever, or whooping cough.

Preventives.—With children who exhibit marks of a constitutional tendency to scrofula, a small frame, pale skin, soft and flaccid condition of the flesh, light fine and thin hair, long and slender neck, with a weak and irregular appetite, an unhealthy condition of the bowels, and a tendency to eruptions about the head, or to swelling in the glands of the neck, means should be employed to renovate and strengthen the constitution, in order to prevent the development of scrofula. Regular exercise in the open air, warm clothing, sleeping in a large room, wholesome, nourishing food, shower baths, or bathing in cold salt water in the morning, and friction to the surface, are the means chiefly to be relied upon, not only for renovating the constitution and preventing the development of scrofula, but they are also important auxiliaries in the cure of the disease after it has become manifest.

Treatment of Scrofulous Tumours, commonly called King's Evil.—When the glands about the neck become swollen and hard, but not inflamed, the tumour should be rubbed gently an hour or more every morning with a warm hand. This treatment, together with wearing flannel next the skin, and exercise in the open air has proved successful in curing many cases. If the appetite be variable, or the bowels in an unhealthy condition, an emetic or full course of medicine will be of signal benefit in aiding to diminish or scatter the swelling of the glands. The course of medicine must be repeated whenever the condition of the patient appears to require it.

Compound Lobelia Pills.—One or two of the compound lobelia pills after meals, and at bed-time, will be useful, by correcting the secretions of the stomach and bowels, and preventing costiveness.

Tonics are proper in every stage of scrofula, when the patient is languid and weak. The spice bitters, gentian, Virginia snake root, quinine, or garden bitters, may be employed, occasionally changing them, as the fancy of the patient, or the judgment of others may determine.

The diet must be nourishing and easy of digestion. Boiled milk and toast, eggs, custards, mutton, the tender part of fresh beef, all kinds of wild game, stale bread and butter, potatoes, and boiled rice are suitable articles of diet in scrofula.

Fresh air, moderate exercise, cleanliness, salt water baths, frictions to the surface with a flesh brush, or salted towel, are of as much importance in the cure of scrofula as medical treatment. Close and crowded school rooms, are improper places for children predisposed to scrofula. It is equally important for such children to avoid getting their feet damp. It is not sufficient to wear merely tight shoes, but the soles should be very thick, to prevent dampness from penetrating them. It is of little avail, as a preventive to disease, to clothe the body warm, whilst the feet are unprotected from cold and dampness.

When a scrofulous tumour becomes painful and inflamed, warm emollient poultices must be applied with a view to favour suppuration, and prevent its being converted into an indolent abscess. Elm, pounded cracker, white pond lilly and ginger, combined together, and wet with warm water, will form a suitable poultice. The poultice may require to be wet occasionally with warm water, to prevent its being hard and dry. If the disease be accompanied by high fever and severe pain, a course of medicine will be required, together with the use of broken doses of lobelia, and once or twice a day a teacup half full of strong bayberry tea, or four or five of the No. 3 pills. If the tumour have been inflamed, throb-

bing, and at the same time the patient affected with chilliness, followed by fever, and after the lapse of some days or probably a week or more, the tumour becomes soft and fluctuates under the fingers, and a blush of red is observed on the skin, the tumour may be opened and the same stimulating poultice applied as long as the abscess discharges; after which some kind of salve or plaster must be applied to protect the part from the influence of the air. Abscesses along the lower jaw, must always be opened from inside the mouth.

Of the Indolent Abscess.—It sometimes happens that a scrofulous tumour, after being more or less inflamed for a time, becomes soft, and exhibits positive signs of its containing pus, but there will be no pain in the part, and the skin over the tumour will be cool, the patient clear of fever, and the system in a torpid condition. This condition of things arises as a consequence of the constitutional strength being too weak to raise or continue the proper degree of inflammation sufficient to carry on healthy suppuration. The efforts of nature subside without accomplishing its design, and the abscess becomes converted into one of an indolent character, which should not be opened, but stimulating liniments or strengthening plasters applied to the tumour, and the constitutional energies restored by the use of tonics, the vapour bath, and shower bath; a course of medicine every few weeks to cleanse the stomach and bowels; and a cold salt water shower bath in the morning, provided the patient does not remain chilly after it. If a glow of warmth comes on in the course of fifteen minutes or half an hour after the bath, it will be certainly beneficial. These means, together with fresh air and wholesome food, may succeed in causing the absorption of the contents of the abscess; or if it should break, or require to be opened, the constitutional efforts will be better able to carry on the healing process. In all cases where a large abscess is either forming, or has discharged its contents, the most nourishing diet must be allowed the patient to supply the system with strength to carry on her healing operations. In case of cold or indolent abscess, wine whey forms a suitable article of diet when the stomach is too weak to take much solid food. Under circumstances of this kind bitters must also be used freely.

A Scrofulous Ulcer is to be known by "its occurring after a suppurated scrofulous tumour—the peculiar dull red, or purple colour of its edges—its remaining indolent for a length of time, neither increasing nor diminishing in size, and its being attended with that peculiar state of health which invariably prevails in the scrofulous constitution."

Treatment of Scrofulous Ulcers.—Constitutional treatment is more important than local applications in the cure of this kind of ulcer. The means above mentioned for cleansing the stomach and bowels, and for improving the health, will be especially adapted to this form or stage of scrofula. Stimulating poultices must be applied to the ulcer, containing a large portion of astringent—either white pond lily, or bayberry, and the poultice wet with a strong tea of the same.

Indolent ulcers may be stimulated to a more healthy condition by filling them with dry, and finely pulverized marsh rosemary, bayberry, or rhattany root, and then apply a poultice or salve over the whole, repeating it morning and evening.

"We have known a sea voyage to heal scrofulous ulcers of bad character which had resisted years of medical treatment."—*Marshall Hall.*

When a scrofulous abscess, after being evacuated, continues to discharge more or less for a great length of time, it should be syringed with castile soap and water, and in order to stimulate a more healthy action of the parts, inject into the cavity weak ginger tea, or a tea made from the inner bark of a young chesnut tree, repeating it every day, and apply over the surface a stimulating poultice, or strengthening plaster covered with pepper.

Tincture of myrrh may be used with benefit as a wash, in cases of indolent ulcers.

Sarsaparilla.—A simple syrupof sarsaparilla, when properly prepared, may be used with decided benefit in scrofula, more especially when the disease has been of long continuance, and the patient feeble and emaciated. I have, in some instances, observed a rapid improvement in patients on taking a syrup of sarsaparilla. The cases in which I have known the most benefit derived from using the syrup, have been patients in whom the disease had apparently become exhausted, and the system left in a languid, impoverished condition. It is questionable whether more benefit is not derived from the sugar of which the syrup is composed, than from the sarsaparilla. On many occasions I have become acquainted with cases of scrofula in which patients have taken from twenty to sixty bottles of Swaim's and other preparations of sarsaparilla without experiencing any benefit from them. Most of the cases of remarkable cures effected by Swaim's Panacea, have been of the character above alluded to—the disease having come to a stop, and the system being in a condition in which a syrup of sugar afforded the most appropriate kind of nourishment to the system, that by its use new blood was made more rapidly, furnishing to the system that nourishment which it required in order to regain strength and flesh.

SECTION II.

GOITRE.

This form of disease, although resembling scrofulous swellings of the glands, is essentially different from scrofula.

Goitre is an enlargement of the *thyroid* gland, situated low on the front part of the neck, and covering a portion of the windpipe. *Scrofula* is seated in the *lymphatic* glands, which occupy a different position from the former. The *thyroid* gland possesses a low degree of vitality, and its *use* has never been ascertained. The *lymphatic* glands have a higher degree of vitality, and they are known to perform important functions. This difference of character between the *thyroid* and *lymphatic* glands affords an explanation of the cause of the difference between *goitre* and *scrofula*.

In the first stages of goitre, the tumour is soft and spongy to the touch.—The skin covering it has a natural appearance, "and is moveable over the enlarged gland." As the disease progresses, the tumour becomes harder, and after the lapse of many years, it sometimes becomes very large, and of a gristly or cartilaginous structure. The usual progress of goitre is very slow, requiring many years before the tumour acquires much size, and, in many instances, it never becomes so large as to occasion great inconvenience to the patient. In some, however, the tumour occupies almost the whole of one side of the neck, extending from the clavicle (collar bone) to the ear. Goitre is very seldom attended with pain or inflammation, and in these particulars, it differs materially from scrofula in general; yet sometimes goitre is attended with darting pains, when the tumour is very large and indurated.

The skin and cellular tissue covering the thyroid gland, yielding readily to pressure, admit the gland to become very large, without pressing upon the wind-pipe to such a degree as to interfere with respiration. When the gland becomes greatly enlarged and hard, it generally occasions some embarrassment in breathing, swallowing and speaking.

Goitre prevails to a great extent among the inhabitants of some valleys situated at the base of high mountains. "In no part of the world is the disease so prevalent, and so distressing in its character, as in some of the valleys of the Alps and Appenines. In certain districts of Switzerland and Savoy, almost the whole of the indigenous population are more or less affected with goitrous enlargements. In the valley of the Rhone, at Martigny, St. Maurice, Aigle, Villeneune, Bourg, Lucerne, and at Dresden, and in the vallies of Piedmont, this disease is extremely common."—*Eberle.*

Some experienced surgeons have mistaken goitre for aneurism of the carotid artery. It has likewise been mistaken for an enlargement of the jugular vein. When only a portion of the gland becomes enlarged and remains soft, it may be difficult for even an experienced surgeon to determine whether the disease be aneurism, enlargement of the jugular vein, or goitre.

Causes.—Great diversity of opinion prevails among medical men in relation to the cause of this singular disease, as it prevails epidemically. Whilst some suppose it to be brought on by drinking water impregnated with lime, and other calcarious substances, others have advanced the opinion that the use of snow water is the cause of the disease. Others have contended that goitre is produced by the use of water entirely devoid of carbonic acid; and others again have conceived it to depend upon particular articles of food. A more plausible theory of the origin of the disease, is that which attributes it to *atmospheric influences*—a *humid, dense atmosphere*, and the *absence of electricity in the air.* "In many deep, damp, and woody valleys, goitre is extremely prevalent; but in proportion as we ascend towards the more elevated and dry situations, on the sides and tops of the adjacent mountains, the disease becomes less and less frequent. It is well known, moreover, that when young persons affected with goitre remove from the valley in which the disease was contracted, to high and dry situations, the tumour almost always becomes considerably diminished in size, and in many instances disappears altogether."—*Edinburg Med. and Surg. Journal.*

Dr. G. K. Mitchel of Philadelphia, states that he frequently finds goitre connected with disease of the heart.

Not Dangerous.—Goitre is not a dangerous form of disease, being very rarely known to prove fatal, except in those situations where it prevails as an epidemic.

Treatment.—This disease is evidently an obstruction in the gland, and is to be cured only by removing this obstruction. The means to be employed for restoring the circulation in the obstructed gland, are frictions with flannel, or with the warm hand; and the use of stimulating liniments and warm fomentations. The application of the vapour and shower bath, and occasionally a full course of medicine, are important, more especially in the earlier stages of the disease, whilst the tumour remains soft.

Patients residing in a district where goitre prevails epidemically, will derive more benefit by a removal to a more elevated situation, where the disease does not prevail, than from any medical treatment.

Washing the tumour with *salt water*, and *sea bathing*, are said

to be beneficial in removing goitre, more especially in its earlier stages, before the tumour becomes of a cartilaginous or gristly texture.

Iodine, in the form of ointment, applied to the tumour externally, is considered by some as an effectual remedy for dispersing such tumours.

CHAPTER XII.

SECTION I.

SUSPENSION OF ANIMATION FROM DROWNING.

When a person is taken out of the water soon after drowning, "the face exhibits a turgid and livid appearance; the eyes are open and staring; the limbs somewhat stiff; the tongue thrust a little beyond the teeth; and the epigastrium tense and tumid."

It is questionable with many physicians whether animation can be restored in drowned persons, after the heart has ceased its motions. There is sufficient evidence, however, to establish a belief, that under favourable circumstances, life may possibly be restored, even after the heart has ceased to act. When a person is drowned in very cold water, it will be more difficult to restore animation, in consequence of the heat of the body having been abstracted by the cold.

It is generally believed that in drowning, water is conveyed into the lungs, but as long as life remains the glottis is closed, preventing the admission of water into the wind-pipe.

Treatment.—As soon as the patient is rubbed dry, and covered warm, stimulating injections should be administered. A table-spoonful of the third preparation of lobelia, or even two or three ounces may be administered at once in lukewarm water. No other means can be employed that are so well calculated to arouse the nervous influence, and excite respiration, as powerful stimulants administered by injection to the bowels, or introduced into the stomach by means of a stomach-pump or gum-elastic catheter. The injection should be frequently repeated. In the place of the third preparation of lobelia, pepper tea or No. 6 may be employed.

The patient should be wrapped in warm dry blankets, and hot bricks, or bottles of hot water, covered with damp cloths, placed at the feet, and around the body, or the vapour bath applied. The body and limbs may be rubbed with the warm hand, or with dry flannels. Stimulants, such as pepper sauce, or No. 6, should also be applied to the surface. The external heat must be applied *gradually*, as the "inward heat" will be very much exhausted. The steam, however, may be of the usual temperature, by observing the precaution to wet the face and surface of the body frequently with cold spirits or vinegar.

Unless there is some degree of sensibility existing, it will be difficult to introduce medicine into the stomach, except by means of the stomach-pump or catheter. In attempting to introduce a tube into the stomach, care will be necessary to avoid the wind-pipe: the jaws should be opened wide, the head turned backwards, and the end of the tube placed against the back part of the throat, which will direct it into the right channel. As soon as the tube is introduced, stimulants may be conveyed through it into the stomach. The third preparation of lobelia should be employed, if at hand; or if not to be obtained, capsicum tea, No. 6, or brandy, may be substituted.

Symptoms which accompany returning animation.—Twitchings of the muscles about the mouth; soon followed by efforts to breathe; sudden motions of the limbs; "a small and weak pulse, beating at irregular intervals; and a discharge of frothy fluid from the mouth."

As soon as the patient can swallow, stimulants such as the third preparation of lobelia, or pepper tea, must be given in small doses, and these frequently repeated.

Wine whey and essence of beef should be given as nourishment, and especial care should be taken to keep the patient comfortably warm. *Vomiting* is often induced when animation is being restored, which is always a favourable symptom.

SECTION II.

SUSPENDED ANIMATION FROM CARBONIC ACID GAS.

Carbonic Acid Gas, produced by burning charcoal, taken into the lungs undiluted with atmospheric air, will very quickly destroy

life. The gas not only excludes oxygen from the lungs, which is necessary to life, but it exercises a deadly influence upon the nervous system, speedily destroying its sensibility.

A person in a tight room where there is a furnace of burning charcoal, will soon become affected with giddiness and faintness, followed by stupor and insensibility, and unless carried into fresh air, life soon becomes extinct. Many deaths have been occasioned from sleeping in rooms in which charcoal was burning, and where there were no means for the escape of the gas.

Carbonic acid gas being heavier than atmospheric air, settles next the floor and fills the room from below upwards. Hence a person lying on the floor, would become affected by it, and sink into a state of insensibility; whilst another person occupying a position near the ceiling would be very little, if at all, affected by it. This affords an explanation why dogs and cats are sooner affected than men, in the same room—the animals inhaling the gas, whilst a man would be above it.

Treatment.—In suspended animation from the inhalation of carbonic acid gas, the patient must be removed immediately into a current of fresh air, and cold water dashed on the face and breast. If the patient be entirely insensible, the clothing should be stripped from the body, and cold water dashed on the head and breast, or the head raised and a stream of cold water poured upon it. Sometimes the first dash of the cold water will occasion a convulsive effort to breathe.

A stimulating injection should be administered as early as possible, and frequently repeated. The third preparation of lobelia with lukewarm water, will form the most effectual injection, and in the absence of this, some other stimulant, as composition, or pepper tea, wine, or vinegar and water. The surface of the body and limbs should be rubbed freely, and bathed with whiskey, or vinegar, and if the patient can swallow, stimulants must be given in small doses and frequently repeated.

When breathing becomes fully restored, the patient may be rubbed dry, and placed in bed, and should continue to take frequently of stimulants, such as capsicum, composition, or wine whey, with carbonate of ammonia. If the patient has not vomited, the third preparation of lobelia may be given in bayberry tea, and the dose repeated until vomiting takes place.

In some instances, after vitality is restored, vigorous reaction ensues: "the heart palpitates vehemently; the pulse is full, strong, and hard; the vessels of the head turgid, and a disposition to heavy sleep ensues. Under these circumstances, the third preparation of lobelia must be given freely, with a view to give the stomach power to regulate the circulation; and in order to place the system more fully under the influence of lobelia, injections com-

posed of lobelia powder in warm water must be administered. The face and breast should be bathed with vinegar or spirits ; and warmth applied to the feet.

SECTION III.

SUSPENDED ANIMATION FROM LIGHTNING.

Persons struck by lightning require the same treatment as in suffocation from gas : to dash buckets full of cold water over the face and breast, and to administer stimulating injections to the bowels with a view to restore the nervous influence, for motion cannot be restored so long as the currents of nervous fluid remain suspended.

Case.—The following case is reported in the fifth volume of the Philadelphia Botanic Sentinel, by Dr. Imri Spruill, of North Carolina : " Mr. Lewis Harrell was called last May to a negro woman who had been struck by lightning ; and," said he, "when I got there I saw about twenty men standing around a negro woman, who appeared to be (as it was thought by all) in the agonies of death, and speechless. Knowing the efficacy of the Thomsonian remedies, I gave her a large dose of the third preparation of lobelia, which soon aroused her, and enabled her to speak. On making an examination, I found that the lightning had struck the back part of her head, and passed obliquely to the breast, tearing a new homespun cap up like gun wadding, and taking a strip of skin off in its way two inches wide, and extending over the breast and lower part of the abdomen to the groin, leaving a streak from the groin down to the sole of the foot. Her under garment was split throughout its entire length with as much precision as though it had been done with a knife. Two or three courses of medicine were administered, and she recovered rapidly.

During a thunder shower : persons should avoid going under a tree for shelter: it is safer to be in the open field or road. In a house the safest place is on a feather bed, the bedsteads should not be near the wall. A bed in the middle of a room, with a piece of glass or sealing-wax under each bed post, would afford almost sure protection from any serious injury, even though the house was struck by lightning. Silk is a nonconductor of electricity, so that by placing a chair upon an old silk dress, in the middle of the room, or standing on the silk will also afford protection against lightning.

CHAPTER XIII.

VARIOUS FORMS OF DISEASE OF THE EYES.

SECTION I.

INFLAMMATION OF THE EYES FROM TAKING COLD.

When the eyes become inflamed by taking cold in them, the inflammation is usually in the membrane that covers the white of the eyes, and the inner surface of the eye-lids. The direct effect of cold upon the eye is to weaken and debilitate it; and the inflammation that ensues is an effort of nature to remove the effects produced by the cold.

Symptoms.—These are a redness more or less extended over the white of the eyes; an appearance of inflammation on the under surface of the eye-lids; a feeling of sand in the eye; a profuse secretion of tears, and sometimes a thick matter in the corners of the eyes and about the eye-lashes, and a strong light is intolerably painful.

Local Treatment.—In inflammation of the eyes proceeding from cold, all kinds of cold applications are to be avoided: for although they may afford temporary relief, they scarcely ever fail of exercising an injurious influence. It is in inflammation of the eyes, arising from wounds or bruises, that cold applications are sometimes found useful. Even physicians of the old school deprecate the use of cold applications in that variety of inflammation of the eyes, which they term *catarrhal ophthalmia.*

Moderately stimulating washes, and warm poultices may be employed with more advantage than cold applications, in all cases of inflammation of the eyes arising from cold.

Eye Washes.—In the early stages of the inflammation, benefit may be derived by washing the eyes occasionally with warm catnip tea, a weak infusion of lobelia, or even with a weak tea of capsicum.

The object of stimulating washes is to increase the secretions from the inflamed mucous membrane. It is in this way that stimulants lessen inflammation of the mucous membranes. The design of the inflammation is to restore the secretions, and hence the application of pure stimulants operates in harmony with the designs of nature.

Astringent washes of every description are improper in the earlier stages of the inflammation, except there be a stimulus in the wash sufficient to overcome the drying effect of the astringent. Astringent washes are applicable to chronic inflammation of the eyes, where the tissues are in a relaxed condition.

Poultices of elm, flaxseed, or Indian mush, adding a small portion of ginger, applied to the eyes warm, and wet occasionally with warm catnip tea, or warm water, will prove serviceable if not continued too long at a time. The constant application of a poultice for several days, would relax the parts so much that the cure might be retarded thereby. The poultice should be covered with gauze or book muslin to prevent its adhering to the eye.

Constitutional Treatment, in inflammation of the eyes, is, in many instances, of greater importance than local applications. Inflammation of the eyes is generally associated with a disordered state of the system. The eyes being weakened by a weakened condition of the vital powers of the system, are thus predisposed to disease from the impression of cold, and when inflammation comes on, the cure will be greatly facilitated by improving the condition of the general health, either by the use of pure stimulants—composition, capsicum, or simple herb teas, together with the use of the warm foot bath, and a careful avoidance of cold ; or by a course of medicine, followed by the use of the stimulants above mentioned, with a view to promote perspiration, and sustain and strengthen the curative efforts of the constitution.

If there be violent pain in the head, injections should be used, containing a portion of lobelia; the feet kept warm, and broken doses of lobelia given in combination with the stimulants.

Inflamed or sore eyes from dust, seldom require any other attention than to wash them with warm milk and water.

SECTION II.

RHEUMATIC INFLAMMATION OF THE EYE.

The globe of the eye, except the transparent portion in front, containing the pupil, and an opening on the back part, for the passage of the optic nerve, is covered by a membrane of a fibrous structure, similar to the tendons of muscles and ligaments about the joints. It is inflammation of this fibrous structure that constitutes rheumatism. When the fibrous membrane of the eye becomes inflamed, it is attended with pain which resembles rheumatic pains, and hence it is termed *rheumatic ophthalmia.* The difference, therefore, between *catarrhal ophthalmia* and *rheumatic ophthalmia,* is the difference in the location of the disease: in the first, the inflammation is seated in the mucous membrane of the eye —in the latter, the inflammation is seated in a fibrous membrane, beneath the mucous membrane.

Symptoms.—These are violent pain in the ball of the eye, "extending to the temples, teeth, lower jaw, and internal ear. The pain is continuous, with occasional fits of aggravation, and is almost always much more severe at night than during the day. The white of the eye is of a yellowish-red tinge, terminating abruptly at the cornea—which latter (the transparent part of the centre of the eye-ball) becomes dull, cloudy, and, as the disease advances, more opaque in the centre than at the circumference." "The flow of tears is at first diminished, but in the course of the disease, it becomes copious.

Causes.—Rheumatic inflammation of the eye is generally brought on by exposure to cold and dampness. More especially is it apt to occur from exposure to cold when the system is under the influence of mercury.

Treatment.—Constitutional treatment is necessary in most cases of rheumatic inflammation of the eye. The means to be employed are such as will restore the natural warmth of the system, cleanse the stomach and bowels, promote perspiration and restore digestion.

First, give stimulants, composition, or capsicum tea, and if the pain be severe, attended with an undue determination of blood to the head, the feet must be placed occasionally in warm water, containing a portion of mustard; and stimulating injections, containing a portion of lobelia, administered once or twice a day, and

the patient kept warmly covered to favour perspiration. If this course of treatment prove insufficient to relieve the pain, a course of medicine must be given and repeated according to the urgency of the symptoms.

The compound lobelia pills if taken in doses of two or three pills, every two hours, will not only afford sufficient stimulus in ordinary cases, but by them the system is brought under the continued influence of lobelia, which is of the highest importance, more especially in the earlier stages of the disease.

When the disease becomes chronic, which means that it becomes protracted and unaccompanied with fever, or other symptoms of reaction, gum guiacum, and bitter tonics, are to be employed, together with the general course of treatment above recommended.

Local Applications.—In the early stages of the disease, when the secretions of the eye are deficient, and the pain in the eye severe, moderately stimulating applications, either in the form of poultices or washes, are required for the purpose of restoring the secretions of the eye. A weak infusion or diluted tincture of lobelia, or weak capsicum tea, may be used for this purpose, and the same kind of poultice applied as recommended in catarrhal ophthalmia.

SECTION III.

SUPPURATIVE INFLAMMATION OF THE EYES.

Symptoms.—This variety of disease of the eyes is marked by a sudden swelling of the eye-lids, attended with a copious discharge of a thick white or yellowish matter. In severe cases the eye-lids become enormously swollen, more especially the upper lid. There is more or less pain in the eyes, even in the milder form of the disease, and where the swelling is very great, the attending pain is usually violent. The mucous membrane covering the eye-ball becomes also much swollen, rising up like a spongy mass, and sometimes overlapping the pupil. A copious secretion of pus takes place soon after the swelling commences, though sometimes the matter does not escape, as it is formed, in consequence of the swelling, causing the eye-lids to be firmly closed. The pus being thus retained, distends the eye-lids in the form of a round fluctuating tumour, the contents of which, sooner or later, escape from between the eye-lids. In the severe form of the disease, there

is always considerable constitutional disorder and generally high fever at night.

Under a proper course of treatment the symptoms, even in this severe form of the disease will generally begin to moderate in the course of a few days, and the eye gradually recover, and become restored to a healthy condition. Occasionally, however, the ball of the eye suppurates, partially or wholly destroying the sight.

Infants are occasionally attacked with sudden swelling and inflammation of the eyes, attended by a free discharge of matter. In them the disease very rarely injures the eyes permanently.

A very destructive form of disease of the eye prevailed epidemically, and to a great extent, in Egypt, "during the British expedition under Sir Ralph Abercromby." This disease received the name of Egyptian opthalmia.

Causes.—The Egyptian ophthalmia was supposed to be caused by a suddenly variable temperature—an atmosphere loaded with dampness and humidity, by the prevalence of a "hot wind loaded with fine particles of sand, and a bright and piercing light of the sun. Another and more frequent cause of the disease in this country is the accidental application of certain poisonous substances to the eye, more especially the matter from the venereal disease.

The disease, as it occurs in infants soon after birth, is occasioned by some morbid secretion being introduced into the eye at the time of the infant's birth. On this subject Dr. Eberle observes, "I have never known a single instance of this disease occurring in infants soon after birth, when, upon inquiry, I did not learn that the mother had been affected with leucorrhœa, or some other morbid vaginal secretion."

Of the Consequences of this form of Disease.—As it occurred epidemically in Egypt at the time above mentioned, the disease proved very destructive to the eyes. The introduction of the matter of the venereal disease into the eye sometimes occasions a loss of its sight, and this form of disease is always difficult to cure. As the disease occurs in young infants it is seldom followed by serious injury of the eye, the matter occasioning the disease being of a less destructive nature than that of gonorrhœal poison. A mild form of suppurative inflammation of the eye is sometimes occasioned by constitutional disorder, and also from ordinary atmospheric influences, but which seldom or never occasion any serious injury to the eye.

Treatment.—In all violent attacks of suppurative inflammation of the eye, a vigorous course of constitutional treatment is imperiously demanded. The patient should have a thorough course of

medicine administered early, and the same repeated daily, until the disease begins to decline. If it should be inconvenient to administer a regular course of medicine, the warm foot bath must be used, and composition or cayenne pepper tea given freely: after this an emetic must be given, and if the symptoms continue to be of a violent character, doses of lobelia in composition tea, must be continued every hour or two: stimulating injections administered three or four times a day; hot bricks wrapped in damp cloths placed at the feet; and the head kept elevated by pillows. If there be high fever, with violent pain in the head and eyes, benefit will be derived by administering a small teaspoonful of lobelia powder in lukewarm water, by injection, and retained. This will relax the system, and generally cause the patient to vomit.

When the disease is of a mild form, and also when it is on the decline, a less energetic treatment will do—merely giving occasionally composition, ginger, or pennyroyal tea, to favour a determination to the surface, and warm applications to the feet. In all cases, however, when the eyes are very much swollen, the system must be placed under the influence of lobelia, and continued in a state of moderate relaxation, more particularly during the early stages of the disease.

In infants, constitutional treatment is seldom necessary, unless the disease of the eyes be brought on by a disordered condition of the stomach and bowels. If the bowels be disordered, injections must be administered. These may be prepared of simple bayberry tea, adding half a teaspoonful of the tincture of lobelia to each injection.

Local Applications.—As the disease occurs in infants, I have found a weak infusion of lobelia, combined with raspberry tea, to be an effectual application. The eyes to be washed occasionally with the above tea, warm. All cold applications are injurious. It may be necessary, in some instances, even in infants, to apply a warm emollient poultice. Slippery elm powder, white pond lily, and crackers rolled fine, with a small portion of ginger, forms a suitable compound for a poultice, which should be wet with warm water, and wrapped in gauze.

The same local applications, viz: lobelia and raspberry tea, and warm poultices, will be proper in the early stages of the same disease, without regard to the age of the patient, or the cause of the disorder. In a later period of the disease, in adults, when the swelling has subsided, and the eye-lids are in a relaxed condition, Dr. Thomson's eye-water, simple tincture of myrrh, a tincture of myrrh and bayberry, or No. 6, will be suitable applications. When the disease has been produced by the application of venereal poison, the eyes should be frequently washed with a strong infusion or tincture of lobelia.

In all cases where the disease has become protracted, and the patient is in a feeble condition, tonics, such as quassia, wormwood, Peruvian bark, Virginia snake root, gentian, &c., must be given, together with stimulants and nourishing food, in order to excite and sustain the curative efforts of nature.

SECTION IV.

SCROFULOUS SORE EYES.

In this variety of disease of the eyes, the inflammation is mostly confined to the margins of the eye-lids, attended with extreme sensibility to light, a profuse secretion of tears, and a thick matter exuding from the edges of the eye-lids and the roots of the eye-lashes, which glues the lids together during sleep.

This form of disease prevails most in childhood, occurring in those of delicate constitution. Sometimes the eyes become diseased from want of cleanliness alone.

In some cases the patient cannot bear the light to come to the eyes, he keeps them constantly closed, places his hands over them, and lies with his face downward.

Scrofulous disease of the eye is generally protracted in duration —in many instances continuing with a greater or less degree of severity many months, or even years, until by the aid of medicine, and other means, or by the natural increase of strength, the constitutional powers are invigorated and the disease thereby removed.

Treatment.—Scrofulous sore eyes, being a constitutional disease, depending upon a feeble organization, not only demands *constitutional* treatment, but in the great majority of cases, requires a considerable period of time to effect a *permanent* cure. In general, much medicine will not be required. Exercise in the open air, wholesome nourishing food, warm clothing, keeping the feet dry and warm, cleanliness, a cold shower bath or sponging the body with salt water in the morning, and frictions of the surface with the flesh brush or salted towel, are important means for improving the general health, and strengthening the constitution.

When the appetite is bad, the breath offensive, or the stools exhibit an unhealthy apperance, an emetic will be beneficial: this will operate still more effectually after the administration of a vapour bath. In recent cases the operation of an emetic will generally be followed by a manifest improvement in the condition of the eyes, and sometimes it alone will effect a cure.

The Compound Lobelia Pills may be used with benefit in almost all cases of chronic disease, whether it be of a scrofulous character or otherwise. These pills do not affect the bowels in the way that cathartics operate; they stimulate the peristaltic action of the bowels, and excite the secretions of their mucous membrane without disordering the functions of the bowels, or weakening the vital powers: whereas cathartics disorder the stomach, and weaken the functions of the bowels. The continued use of a cathartic—for instance, a small dose of Epsom or Glauber salts, taken daily, or every few days, by provoking irritation in the bowels, and lessening the determination of blood to the surface, may diminish the inflammation of the eyes; but the constitutional disorder will be increased, because digestion must necessarily be impaired by the action of the salts—which merely change the symptoms of the disease, without restoring the health. Leta child in good health be purged with salts every day, and this continued for a week, the digestive powers at the end of the week will be impaired, the warmth of the system will be reduced, and the bowels will remain enfeebled and inactive for several days after. The absurdity of administering such medicine to one whose constitution is feeble, and the general health deranged must be apparent to every unprejudiced mind. To change the symptoms of disease by the use of cathartics, or by administering poisons, is one thing, but to remove disease from the system, is quite a different matter.

Purified Charcoal may be used with advantage in cases of costiveness, more particularly when accompanied with an acid condition of the stomach. The dose is a teaspoonful two or three times a day, taken before meals.

Salt and Vinegar.—When patients have an inclination for acids, such as vinegar, or lemon juice, as they frequently have in scrofulous complaints, where digestion is impaired, a mixture of salt and vinegar will sometimes be found of signal benefit in improving digestion.

Tonics must be given when the patient is in a feeble and relaxed condition. Spice bitters are proper to be given during any period of scrofula: they may be given both as a mild tonic, and a stimulant, supplying the place of stronger stimulants and tonics, in milder cases of the disease.

Sarsaparilla.—A simple syrup of this article is an admirable medicine for scrofula in certain conditions of the system. I have occasionally observed the most marked benefit from its use in cases where the disease had apparently come to a crisis, the patient remaining in a weak and languid condition. But whether the pa-

tient be most benefited by the sarsaparilla or by the syrup of sugar, is not very easy to decide.

Burdock root tea, has been employed with great advantage in cases of scrofulous sore eyes. The tea to be drank freely, and the eyes wet with it several times a day, the narrow-leafed yellow dock root may be used for the same purpose.

Local Treatment.—In scrofulous sore eyes, it will be found on examination that some of the eye-lashes are dead, and thus operating as foreign bodies to the parts, occasioned very disagreeable itching in the eye-lids; and the formation of matter at their roots. The removal of these dead eye-lashes, therefore, is important in the cure of the disease. A little observation will teach one how to distinguish the living from the dead lashes, and they are very easily removed, without pain, by a pair of tweezers. I have, on several occasions removed, at one time, over one hundred dead eye-lashes from the eye-lids of a patient affected with sore eyes; and sometimes this is all that is required in the way of treatment; the eyes becoming well soon after. In scrofulous constitutions, however, the disease of the eyes will rarely be radically removed until the general health be restored, or at least manifestly improved.

The most effectual remedy I have found for sore eye-lids, is No. 6, or the simple tincture of myrrh. The eye-lids must be wet with the medicine two or three times a day. It may be applied to the lid with the end of a feather, or a small paint brush. It is not necessary that the wash should touch the eye-ball, still it would do no injury.

The diet must be light, yet nourishing; fresh beef and mutton, poultry, wild game in season, eggs, boiled rice and milk, boiled milk and toast, toast and cream custard, stale bread and butter, black tea, chocolate, and all wholesome vegetables may be used; provided they be found to agree with the stomach.

When scrofulous sore eyes are accompanied with eruptions on the face, or running sores behind the ears, the treatment should be the same as already described, observing especial care when the vapour bath is administered to protect the skin surrounding the affected parts from the irritating secretions which the steam will cause to be discharged from the eruptions. The secretions from scrofulous eruptions are sometimes so acrid that they produce an eruption on the surrounding parts wherever they are touched by them, and in this way the disease will spread over almost the whole of the face, and sometimes extend from behind the ears down to the shoulders, and cover a portion of the back. This may in general be prevented by bathing the parts surrounding the eruption with No. 6, or the tincture of lobelia, immediately after the bath, the

parts being also protected at other times when the eruptions are discharging. These eruptions require the same plan of treatment recommended for the cure of scald-head, namely: to prevent the admission of air to the eruption by the application of salve or ointment, together with the use of medicines for correcting the general health.

Case.—A little boy, living in Christian street, was affected with scrofulous sore eyes, attended with eruptions over the face and back of the ears, and after the disease had continued more than eighteen months, the patient was placed under Thomsonian treatment, which speedily improved the general health, but the eruptions suppurated freely, causing extensive patches of raw surface secreting pus. Necessary care was not taken for preventing the discharge from affecting the surrounding parts, and the disease consequently commenced spreading considerably.—The parents became discouraged, and applied again to the old practice. The treatment next pursued consisted in the continued use of salts, and cooling applications to the surface.—Under this course of treatment the determination of blood to the surface was lessened, the system became cold and inactive, and as the disease left the face, the hip and knee became affected with scrofula, attended with years of suffering, and followed by distortion of the limb. The cooling treatment occasioned the disease to become fixed in the hip, which would have been kept on the surface and eventually cured under Thomsonian treatment, and the disease prevented from seating itself in the hip.

SECTION V.

BLINDNESS.

(*Total or Partial.*)

A TOTAL or partial loss of sight is caused by a variety of forms of disease of the eye, or more properly, different parts of the eye are liable to become diseased, occasioning loss of vision. Thus blindness may be produced by disease of the optic nerve, which conveys impressions to the brain. This form of disease is called *amaurosis.*

A very common cause of blindness is an opacity of the crystalline lens, or its capsule, designated by the term *cataract.*

Sometimes a total or partial loss of vision depends upon disease of the transparent cornea of the eye, which is liable to become

clouded and thickened; and occasionally it becomes very much swollen, bulging out from the centre of the eye-ball, forming a tumour as large as a cherry. The eye is also liable to dropsy, cancer, and to gangrenous uleration; which happily, however, are of very rare occurrence.

Symptoms of Amaurosis—Disease of the Nerve of the Eye.—In this form of disease the eye does not present any particular appearance of disease upon a superficial examination, except that the expression is *vacant*, but on a closer inspection we find the pupil dilated, and on applying a lighted candle near, the contracting power of the pupil is observed to be either lost, or greatly diminished. "There is frequently the sensation as if a cloud were before the eye," and the pupil often presents a greenish appearance. The sight is obscure, or the power of seeing is lost.

Causes.—Close and long-continued application of the eyes to minute objects, more especially by candle light; paralysis of the optic nerve from disease of the brain, or from constitutional disorder, is the usual cause of amaurosis.

Treatment.—Almost the only hope in cases of amaurosis, is an early and vigorous course of constitutional treatment, with a view to restore the circulation of nervous fluid in the diseased nerve. Frequently, however, the disease depends upon causes that render all medical means abortive; still a trial should be made as by it the sight may possibly be restored, or at least greatly improved. Many cases have been cured by the use of emetics.

When amaurosis is connected with manifest derangement of the general health, there is stronger reason to anticipate benefit from the operation of emetics, but still more from full courses of medicine.

Besides constitutional treatment, stimulating washes should be frequently applied to the eye, such as capsicum tea, or Thomson's eye-water, and the patient continue as much as possible in the light. The frequent application of volatile salts to the nose, and snuffing freely of composition or other stimulating powder, may assist in restoring the function of the optic nerve.

Cases of amaurosis have been cured by the application of electricity and galvanism.

Concerning the Treatment of Cataract little need be said here, as the disease is one which requires an operation by the hands of a surgeon. In the incipient stage of cataract, however, a proper course of constitutional treatment may in some cases prevent the further progress of the disease, and even cause the absorption of the cataract. The constitutional treatment for cataract does not differ from that recommended in amaurosis.

SECTION VI.

STYE.

The formation of a small abscess on the eye-lid, called a stye, is of very frequent occurrence. It is generally occasioned by a disordered condition of the stomach. Sometimes it is caused by the presence of a dead eye-lash, the abscess being formed at the root of it.

Treatment.—When the stye becomes painful and considerably inflamed, cooling applications should be made to the eye—frequently wetting the eye with cold water, or applying a poultice of slippery elm, or of flaxseed stewed with Indian meal, until it becomes well softened. If there be a dead eye-lash in the centre of the stye, it should be pulled out, which sometimes, when done early, will check the progress of the abscess. Rubbing the stye, when it first appears, with cold metal, a silver spoon or knife-blade will, it is said, prevent an abscess from being formed in many instances.

SECTION VII.

FISTULA LACHRYMALIS.

(*Obstruction of the duct which conveys the tears from the eye into the nostril.*)

The tears and mucus secreted in the eye are conveyed into the nostril through a small duct, which is liable to become obstructed by various causes, and then the tears instead of passing into the nose, are obliged to flow over the cheeks, proving a source of extreme annoyance.

The obstruction may take place at the inner corner of the eye, where the duct commences, and may be remedied by the careful introduction of a fine silver or gold pin through the duct into the lachrymal sac, which is an enlargement of the duct about a quarter of an inch from its commencement. If the obstruction be seated in the duct below this little sac or bag just alluded to, the tears

will pass down into the sac, and being retained there in consequence of the obstruction below, it becomes swollen into a round tumour as large sometimes as a chestnut. The tumour will be situated a short distance below the eye near its inner corner. By pressing upon the tumour the contents will be forced upwards and pass out at the eye, or if the obstruction below the tumour be not complete, the tears contained in the sac may be forced into the nostril. "The complaint sometimes remains in this state for years, with little inconvenience, pressure being occasionally made upon the sac to empty it." Sometimes the tumour suppurates and breaks externally, and the tears will pass out through this opening, and flow over the cheek. The sac is now very liable to frequent attacks of inflammation and suppuration.

Treatment.—In the early stage of this complaint, constitutional treatment, particularly the vapour bath with an emetic, have in some instances, overcome the obstruction and effected a permanent cure. The disease, however, is seldom curable by constitutional treatment—the only chance of success by it is in the early stage, and especially when the obstruction is owing to inflammation and swelling of the duct. When these exist, the use of the vapour bath, together with relaxing the system fully by lobelia, and promoting perspiration and an equal circulation by the use of stimulants, such as capsicum or composition, may prove successful in restoring the duct to a healthy condition.

When the tears flow over the cheek, and the lachrymal sac, just below the eye, is not swollen, it affords evidence that the obstruction is in the duct between the eye-lid and the lachrymal sac. This obstruction may be removed by passing a small silver or gold pin down the duct into the sac.

Sometimes the lachrymal sac becomes diseased, and secretes from its surface a thick matter which does not pass readily through the duct, and the sac becomes distended, requiring to be pressed upon in order to force the thick matter up to the corner of the eye, or down into the nose.

A gentleman not long since told me that he was cured of an obstruction in the duct that leads the tears into the nose, by the operation of a course of medicine. The disease had continued for many months, the tears passing over the cheek. During the operation of the emetic the tears resumed their natural channel by the removal of the obstruction in the duct. It is not to be inferred, however, that many cases of this affection can be removed by a course of medicine. It is only under particular circumstances that we can reasonably anticipate a cure by constitutional treatment.

A common practice in this complaint is to introduce a gold or silver tube down the course of the duct, and thus lead the tears into the nostrils. In some cases this tube answers a good purpose —in others it does injury.

CHAPTER XIV.

SECTION I.

INSANITY—MENTAL DERANGEMENT.

Insanity depends upon a diseased condition of the *brain*, which is the *organ* of the mind.

"The mind consists of a plurality of innate and independent faculties, a congregation of separate and primary powers."—(*Fowler.*) Each faculty of the mind has its especial organ, and when only a part of the brain is diseased, those faculties only will be deranged or destroyed which are located in the diseased part. Thus the doctrine of phrenology explains the reason why an individual may be insane on some subjects, and at the same time quite rational on others.

There is a close and intimate sympathy existing between the mind and the body, so that a change in the condition of the one will vary the condition of the other. Who has ever experienced a flow of good spirits during a fit of ague, or in the commencing stage of small-pox, or in the early stage of any other form of disease, when the brain is deprived of its due supply of blood and nervous energy? In proportion as the nervous energy of the brain is enfeebled, and the supply of arterial blood to it lessened, so in proportion will the mind become enfeebled—it cannot be otherwise—yet still the mind may be free from insanity. Cases occur, however, where the brain receives so small a supply of arterial blood, in consequence probably of long-continued inveterate dyspepsia, that it does not generate a sufficient quantity of nervous fluid to support the mind, and consequently it sinks into a state of imbecility, and sometimes into insanity. A blow upon the head, producing concussion of the brain, stops at once the operation of the mind until the brain recovers from the shock. And again, sudden impressions made upon the mind exert a powerful influence upon the brain and digestive organs. Too close attention to study immediately after dinner, weakens digestion by causing an afflux of nervous energy to the brain, and thus determining it from the stomach, enfeebles digestion.

A sudden shock of the mind soon after a meal, such as sudden fright or some distressing news, will suspend the power of digestion. This intimate connexion existing between the mind and the body

leads us to perceive the cause of mental derangement in the diseased condition of the *organs* of the mind.

Causes.—In some families there exists a *predisposition* to insanity, so that several members of the same family will be affected with the disease.

Moral influences by disordering the organs of the mind, occasion insanity. Thus, by close, long-continued, and deep study, the blood vessels of the brain may become diseased, and so far derange the functions of the brain as to occasion insanity. A great variety of moral influences,—disappointed love, religious enthusiasm, fanaticism, excessive joy, jealousy, and long-continued depression of mind sometimes produce insanity.

Physical causes.—These are excessive losses of blood, exhaustion from long-continued inveterate dyspepsia, habitual drunkenness, injuries of the head, abscess in the brain, the inordinate use of mercury, the use of narcotic poisons, and a diseased condition of the stomach and bowels. Some of the early writers on medicine have maintained that mental derangement has its seat in the stomach—the diseased condition of the functions of the brain being the consequence of a disordered condition of the stomach.

Chances of cure.—Of the cases of insanity that occur, probably less than one-half are cured. The great majority of cures take place within the first year from the commencement of the disease. After the disease has continued without intermission over three years, there is little hope of the patient being restored to perfect reason; still recoveries sometimes take place after the fifth or sixth year from the commencement of the derangement.

It is stated by physicians who have attended in *lunatic asylums*, that *partial* insanity and *melancholy*, are more difficult to cure than a general derangement of the mental faculties unattended with *melancholy*. It is also ascertained that patients who have a distinct recollection of recent occurrences, "with an oblivion of events long passed," are more easily cured, than those who have a recollection of events long past, but who cannot remember occurrences that have recently transpired about them. "In general, acute and furious mania is much more under the control of remedial management than low, torpid, and fatuous insanity. Mental derangement from physical causes, generally yield more readily and permanently than when it arises from moral causes. A recovery of the general health of the system, without a corresponding melioration of the mental disease, is said to be an unfavourable sign."—(*Eberle.*)

1. MANIA—GENERAL INSANITY.

Symptoms which characterize general Mental Derangement, or Mania.—These are a rapid succession of incoherent ideas, and violent excitement of the passions, expressed by great agitation, loud vociferation, singing, menaces and fury.

Torpor of the bowels, cold extremities, variable appetite frequently craving, sudden and frequent variations of temper, the patient often manifesting a vicious disposition, an inability to sleep much, and frightful and distressing dreams, are symptoms which generally precede the occurrence of mania.

"When the disease is once fully developed, the expression of the countenance is wild, and often furious; the eyes are prominent, sparkling, and in constant motion; the patient sings, whistles, vociferates, halloos, walks to and fro with rapidity, or stands still with his hands and eyes often raised towards the heavens; he does not sleep for many nights, sometimes not for several weeks; he often manifests great muscular power; the skin is dry, cool, and occasionally covered with profuse perspiration." It is stated that the exhalation of a peculiar and disagreeable odour from the body, and excretions is peculiar to maniacs.

"In the violent grades of mania, the mind forms erroneous perceptions of the impression of external objects on the senses, or the senses convey erroneous impressions to the mind. In this case the patient does not recognise the persons and objects around him; mistakes friends for strangers, and commonly visiters for his relations, loses the consciousness of his individuality, and is ignorant of the place he occupies, of his rank and condition in society, and of the lapse of time. The imagination is sometimes so powerfully excited, that its representatives prevail over those of the senses. The patient hears voices, holds conversations with persons whom he imagines are present, and in some cases these *voices* harass him wherever he goes, by day and by night, in public and in private. Sometimes the empire of volition seems to be entirely suspended, and the patient is no longer master of his own determinations. An irresistible impulse leads him to injure himself, or to inflict injury upon others, to tear the clothes from his body, run out naked into the streets, leap out of the windows, and commit other acts of fury."

2. PARTIAL INSANITY.

In this form of mental derangement a part of the organs of the faculties, or of a single faculty of the mind, only is diseased, so that the patient will be insane upon one subject and entirely rational on others.

"This is by far the most common form of mental derangement, and it is always entirely free from delirium or paroxysmal raving."

In that variety which is usually denominated *hypochondriasis*, the hallucinations relate to the patient's own body, or to the circumstances which he conceives have an especial sinister influence upon his own *system*, fortune, or happiness. The suggestions of his morbid imagination are taken for realities. He believes himself afflicted with some certain incurable and fatal disease, particularly with consumption, cancer, or stone, and above all, with impotency and the venereal disease. He fancies that some poison has been maliciously introduced into his system; or that he has a living animal, or some other very injurious substance in his stomach or bowels. Some patients believe themselves transformed into inferior animals, and others imagine themselves to be made of glass, wax, butter, &c.

Some patients are insane on the subject of religion; others upon the subject of love, wealth, or ambition. I knew a minister, a member of the society of Friends, who visited England and returned again entirely insane on the subject of religion, but was perfectly sane on other subjects.

Treatment of Mental Disease.

The medical profession have almost abandoned the use of medicine in the treatment of insanity, depending almost exclusively upon moral influences—*a removal of the patient from home, and kind treatment*, are the means chiefly relied upon by those who have had long experience in treating mental disease.

From the good success that has attended Thomsonian treatment in several cases of insanity, depending upon a disordered condition of the stomach, or upon a diseased state of the system generally, there is reason to believe that in many instances a cure may be effected by this system of practice. The failure of the old school practice of medicine furnishes no just criterion to judge of the effects of Thomsonian treatment. A patient may have taken emetics of tartarized antimony, without being benefited, and yet be greatly benefited by a Thomsonian course of medicine. Mercurial preparations, cathartics, cupping, leeching, together with the the use of all the remedies which are employed by the medical profession for reducing what they call morbid excitement, may fail of doing good, when an opposite and more rational course of treatment may prove successful in removing the disease, by aiding nature.

Case.—During last winter, I attended a patient who had become insane through religious enthusiasm. She had been in fee-

ble health for many years. On my first visit I found her under the bed, and when brought from her hiding place, she manifested a high degree of mental excitement, frequently bursting forth in a continued and rapid strain of imprecations and curses, until she became exhausted, when she would lie down for a time and sometimes hide her head under the pillow, or throw her limbs about as though suffering bodily distress. In this case I found the most signal benefit from giving lobelia emetics. Every time she vomited freely, and the system became relaxed under the influence of the lobelia, she became quiet and would sleep several hours. Under this treatment, namely, an emetic given at intervals of one or two days, and broken doses of lobelia given at intervals of every two or three hours, as the patient could be persuaded to take them, not resorting at any time to compulsory means, except when the patient made an attempt to go out of the room. During the operation of the fourth or fifth emetic, a large mass of thick dark green matter was thrown from the stomach, the muscular system became fully relaxed, the patient continuing many hours very sick and much distressed, after which she became calm and composed and had no return of insanity except in a very slight degree.

In another Case of Mental Derangement occurring in a young man, of this city, medicine appeared to have scarcely any appreciable effect on the disease. The derangement had approached in a gradual manner, his family and friends having frequently observed him to be absent-minded, and occasionally disposed to melancholy, secluding himself from the society of his own family; and then again to form some scheme for regenerating the world, or to attempt to engage in some wild speculation. This condition of mind continued several years before he became entirely insane. Although medical treatment appeared to have scarcely any effect, yet under kind treatment from his family the mental derangement improved so that he was removed to the family of a friend, and from that time he began to recover more rapidly, until all the symptoms of insanity disappeared.

When the insanity is general, and comes on suddenly, attended with great excitement and even furious delirium, it is in general much more under the control of medical treatment, than when it is accompanied with melancholy, and a torpid condition of the system, or when the case is one of partial insanity.

"One of the first measures in the treatment of *mania*, should be to remove the patient from his friends, and to place him in some quiet and secluded situation. Dr. Rush strongly insists upon the importance of separation and proper seclusion; and the most eminent of the English, German, and French writers, advise the adoption of this measure." "Let it be observed, however, that in recommending separation and confinement, it is not intended to

object to regular exercise in the open air, and the enjoyment of the society of suitable persons during the patient's intervals of comparative calmness. Whenever the weather is favourable, and the patient's condition will admit of it, free air and ample exercise should be allowed. The mutual association of patients similarly affected, and particularly during convalescence, has also a favourable tendency."

Idleness is unfavourable to the recovery of patients affected with *partial* insanity; they should be allowed, and even persuaded to engage in amusing exercises, "as plying at quoits, the chase, shooting, and even chess, checkers, cards, and push-pin should be preferred to idleness."—(*Rush.*)

The Medical Treatment generally pursued in the different asylums, and hospitals for the insane, is the chief objection to these institutions. Established for the purposes of benevolence and philanthropy, and under the government of persons experienced in the management of the unfortunate insane, and with the advantages which they afford in relation to discipline, exercise and amusement, these institutions, apart from the medical treatment practised upon the patients, should receive the sanction and support of every member of the community.

"In the furious state, insane patients should never be contradicted, however absurd their opinions and assertions may be, nor should we by our answers deny their requests, when it is proper to grant them. In the second stage of the disease, we should *divert* them from the subjects upon which they are deranged, and introduce as it were accidentally, subjects of another and of an agreeable nature. When they are upon the recovery, we may *oppose* their opinions and incoherent tales, by reasoning, contradiction, and even ridicule."—(*Rush.*)

When insanity is brought on by the sudden suppression of the catamenia from cold, the treatment must be directed to the removal of this obstruction. The means to be employed, are, the warm stimulating foot baths, stimulating enemas, the vapour bath, emetics, and the free use of the compound lobelia pills.

When the patient is in a sunken and depressed condition, a course of medicine will awaken an action in the system, and in recent cases, it will be certainly beneficial.

Insanity, which sometimes follows child-birth, is generally curable by medical treatment. The most important of which, are stimulating enemas, containing a portion of lobelia, emetics, the continued use of broken doses of lobelia in composition, or pepper tea, warmth applied to the feet, and the vapour bath and shower bath used when practicable.

In many of the cases of insanity the patients will have a morbidly

craving appetite, so that they will eat four times as much as is necessary, and more than the stomach can receive with impunity. In such cases, therefore, it is necessary to allow the patient as much food only as will be requisite for his sustenance, and not allow him to overload and oppress the stomach.

SECTION II.

DELIRIUM TREMENS—MANIA A POTU.

(*Craziness from Drinking.*)

This is a species of mental derangement occasioned by *habitual drunkenness;* or, by the intemperate use of opium.

Symptoms.—The disease comes on after the excessive drinking of ardent spirits. The digestive powers are prostrated by the poisonous effect of the liquor; there is distress at the pit of the stomach, loss of appetite, nausea, great agitation and distress of mind, and tremulous motions of the limbs.

As the disease continues, the countenance of the patient becomes more expressive of alarm and suspicion; there is continual restlessness, and increased mental agitation. The tremor of the hands increase, and in some instances, the whole muscular system is agitated as though the patient were labouring under a fit of ague. "The eyes are cast about with quick and scrutinizing glances, or often fixed, apparently, upon some object that attracts the attention for a moment, and then quickly withdrawn. The patient is unable to sleep, either by day or night. He fancies that he sees snakes, cats, mice, and other animals in his room, and disgusting vermin crawling over the bed and on his clothes, or fancies that various persons have entered his room, for the purpose of robbing, killing, or injuring him. To avoid these and other horrid illusions, he often calls out loudly for assistance; runs to the door to make his escape, or to the window to leap out; is greatly agitated, vociferates, threatens, and sometimes raves violently. Sometimes he fancies that he hears loud and strange noises around him over head, in an adjoining apartment, or loud and frequent knocking at the door. His mind and body are in a continued state of action; he calculates, projects, walks hurriedly about the room, thinks he picks up money, runs up to the window, and calls out to some imaginary person in the street, starts with terror and agitation from the presence of frightful and disgusting apparitions, insists that he

is well and confined with some sinister intentions against him, and requests to be suffered to go out in pursuit of his usual occupation. If the patient be flatly contradicted, he usually becomes much exasperated, and insists with vehemence on the correctness of his notions; but when he is soothingly dealt with, he will now and then answer questions mildly and even distinctly; and by judicious management, may, in general, be restrained without any violent coercive measures." The skin is cool and generally covered with perspiration.

In some instances the symptoms are slight, and pass off in the course of two or three days: whilst in others the patient becomes furiously crazy, does not recognise any one, halloos, or talks continually, and is controlled with difficulty.

The Duration of Mania á Potu varies from two days, to several weeks, and in some instances it has been observed to continue several months. Under a proper course of treatment, the patient will in general be restored to reason in less than a week from the commencement of the delirium. Much depends, however, upon administering the remedies early in the disease, as in many instances when the disease is fully seated, it is with the greatest difficulty that the patient can be persuaded to take sufficient medicine to produce much effect. Mild cases of the disease have frequently been observed to terminate speedily after spontaneous vomiting, or the supervention of diarrhœa.

Fatality.—Delirium tremens rarely terminates fatally, except when it occurs in patients affected with extensive disease of the liver, or other important organ, or the constitutional energies are broken down, either by disease, or by a long course of intemperance.

Unfavourable Symptoms.—A rapid and very small pulse; coldness of the limbs, the skin covered with cold sweat, constant delirium; the pupil of the eyes contracted, and twitching or working of the muscles of the face, are symptoms indicating danger.

Favourable Symptoms.—One of the most favourable symptoms in mania á potu is an ability to sleep tranquilly, even though it may be of but short duration. The practice of giving opium to produce sleep is often attended with injurious consequences, it prostrates the power of the stomach, and in many instances it increases the wakefulness and aggravates all the symptoms. At most it does but blunt the sensibility, without removing the cause, or restoring to the system its lost vitality.

Mania á potu essentially consists in a weakened condition of the vital principle. The functions of the stomach are prostrated

—digestion is suspended; the system is not supplied with nourishment; the temperature of the body is reduced; the bowels are torpid, or they may be provoked by the acid state of their contents, occasioning diarrhœa; the nervous power is enfeebled; and the brain is deprived of its natural healthy stimulus, the morbid effects of the liquor having previously weakened its functions. Nature struggling to regain her lost power occasions the excited condition of the system attending mania á potu.

Treatment.—The medical treatment for the cure of mania à potu should be such as will aid the efforts of nature to throw off the disease. This is all that medicine can do to benefit the patient in any case of disease. The warm foot bath, vapour baths, emetics, pure stimulants, astringent or anti-canker medicine, and injections, are the means chiefly to be relied upon for the cure of this disease.

The warm foot bath should be used before giving an emetic, and in mild cases it may supply the place of the vapour bath.

The Vapour Bath relieves the symptoms by equalizing the circulation of the blood and nervous influence, restores for a time the natural heat of the system, and thus increases the sensibility of the stomach to the impression of medicines, rendering their operation more effective—throws deleterious substances out of the blood by exciting free perspiration and a determination to the surface: in fine, it aids the efforts of nature, generally, to bring about a crisis, and cast off the disease. After steaming, and the patient has been rubbed dry, the surface may be bathed with No. 6, or stimulating liniment.

Emetics.—I have invariably observed more benefit derived from the use of emetics than from any other means. Sometimes mania à potu is observed to terminate by spontaneous vomiting. Merely evacuating the stomach is not sufficient, however, except in cases of a very mild character: the mucous membrane is in most instances thickly coated with morbid secretions, which require the continued use of stimulating and anti-canker medicine for two or three days, besides frequent vomiting, before the stomach will become cleansed of morbid secretions, and its power of digestion restored. The third preparation of lobelia is the best form, yet it may be taken either in powder, infusion, or in tincture. Whatever form of lobelia is used, it should be given in sumac or bayberry tea. After the operation of an emetic, if the symptoms be not very much relieved, a teacup half full of a strong decoction of bayberry or sumac, adding from a teaspoonful to a tablespoonful of the liquid of the third preparation of lobelia, must be given every hour or two, as the patient can be persuaded to take it:—this sup-

plies the place of all other medicines. Sometimes it requires considerable management to induce the patient to take medicine. Thus, if a patient have a craving for liquor, he will often take a dose of medicine on the promise of having after it some gin or brandy, or whatever other liquor he may crave; after taking the medicine a teaspoonful or more of the liquor should be given, diluted with water. I have known instanees where lobelia has been taken freely in brandy and water, the patient obstinately refusing to take it in any other way. Some writers advocate the use of alcoholic liquors, as a remedy in this disease, whilst others oppose its employment on all occasions. I have in a few instances given patients liquor, but have never as yet observed any good effects resulting from it: on the contrary, the symptoms have been almost invariably aggravated by it, except when given in very small quantities. The disease requires stimulants, but they should be pure stimulants, and not the same poisonous articles that occasioned the disease. Although mania à potu seldom occurs whilst the patient continues to drink, the symptoms first appearing after the drinking is stopped, yet it is the drink that prostrates the vital powers and occasions the derangement which essentially constitutes the disease; and the longer the drinking be continued the worse it will be for the patient. The long-continued use of opium will cause mania à potu, and the practice of prescribing this article as a remedy in disease, is almost, if not equally as absurd, as to give a patient brandy to cure a disease brought on by its use. It is very desirable that the patient be able to sleep, not, however, by means of a drug that will deaden the sensibility of the brain, prostrate the powers of the stomach, and probably produce serious congestion in the blood vessels of the brain, and prolong the disease. In a mild case of the disease a dose of opium may sometimes cause the patient to sleep, and not be materially injured by it; but in those eases a vapour bath and emetic, followed by broken doses of lobelia, would bring the disease to a crisis much sooner, and the cure be more complete than by the use of opium, or probably by any other means.

During the act of vomiting, the patient's head should not be allowed to be lower than the level of his body, for the action of the blood vessels of the brain being weakened, the blood circulates sluggishly through them. This requires that the head be kept somewhat elevated, in order to favour the returning eirculation. When the skin and extremities are cold, an injection should be administered and also a vapour bath, before giving an emetic. If these eannot be aceomplished in consequence of the strenuous opposition of the patient, still the lobelia should be given in some form. If injeetions can be given the lobelia powder may be administered in this way in lukewarm water, which if retained will occasion vomiting, and exert even a more beneficial influence upon the system than when taken into the stomach.

Injections.—Besides the plan just spoken of for placing the system under the influence of lobelia, stimulating injections will prove of especial service to the patient. By relieving the bowels they withdraw the excitement from the head.

Tonics.—When the disease is overcome, bitter tonics may be used to restore digestion.

Of the efficacy of Thomsonian treatment in reforming drunkards.

Case I.—A man employed in the sheriff's office in this city, had indulged in the use of strong drink, until he became so much a slave to it that he was rarely entirely sober. He was sensible that he was on the high road to ruin, and occasionally he would form a resolution to quit the degrading practice; but the functions of his stomach had become so much impaired that his system was not furnished with sufficient stimulus, from food, to support the energies of his mind, and in moments of extreme mental depression, he would again resort to his accustomed drink, and as soon as one glass was taken his resolution was overcome, and he relapsed back into his former habits. Speaking to a friend one day of his anxiety to quit drink, and of his unsuccessful attempts to do so, from the occasional hankering for stimulus, his friend advised him to get some of the Thomsonian composition powder, and when he felt the want of a stimulus to take a dose of the composition. He accordingly obtained the composition, and ontaking it as directed, it furnished an agreeable stimulus, without disordering the brain; overcame the desire for liquor, and at the same time restored the tone of his stomach to a healthy condition; so that in the course of a year he became changed from drunkenness and wretchedness, and enjoyed perfect health and a fine glow of spirits. He is now actively engaged in the temperance cause, and through his example and persuasion others have been induced to resort to the use of the composition powder, with the same happy result.

Case II.—A merchant of this city who had formerly resided in the south, had contracted the habit of excessive drinking, and was occasionally attacked with mania à potu. Having experienced good effects from vomiting, he determined on taking a course of Thomsonian medicine, to have his stomach thoroughly cleansed, and then to refrain from the use of strong drink altogether. He stated to me that he had often resolved to quit the injurious practice, but that his spirits sometimes became so much depressed and his appetite so bad, that his resolution to refrain from liquor gave way, and he would again take a glass;—this was soon succeeded by another, and thus he would go on drinking until his stomach turned against it, when he would be attacked with symptoms of

mania à potu. After this patient had placed himself under Thomsonian treatment he did not relapse again into his former habits except on two or three occasions, and then a course of medicine was administered, and the general course of treatment adopted that is recommended for mania à potu, which shortened the duration of the disease, and by the daily use of pure stimulants the digestive powers were finally restored so that the patient was exempt from that state of mental depression, which had so frequently led him to resort to spirituous liquors. This gentleman has continued a sober man during the past two years, and doubtless will continue so.

Case III.—During the summer of 1838, a man called at my office, and gave me the following history of his case. When about the age of thirty he became dyspeptic from close attention to business, and experienced at times extreme lowness of spirits, with trembling of his hands. An acquaintance recommended brandy and water, which he took and experienced temporary relief: continuing to take his glass of brandy and water whenever he felt the want of a stimulus, he at length found that the dyspepsia was gaining ground, and that the attacks of nervous weakness were more frequent, requiring a more frequent repetition of the brandy; and finally his nervous energy became so prostrate that he was induced to fly to his accustomed stimulus, the first thing in the morning, and to continue under its influence during the whole of the day. It was now sixteen years since he commenced the use of brandy, and (said he) "to speak plainly, I am a confirmed drunkard." He was willing to submit to any course of treatment that would restore his digestion, so that he could do without the brandy, which he was sensible had gained the upper hand of him. I told him, if he was anxious to quit the use of brandy, I had no doubt that he could do it, and be restored to health. He placed himself under treatment, which consisted in an occasional *course of medicine* and the free use of cayenne pepper, more especially at meals, and when he felt the want of his accustomed stimulus to take a dose of No. 6, or of composition. The result was most happy—he quitted the use of brandy without much difficulty; his digestion was restored, and he now enjoys good health, not having taken any kind of intoxicating drink during a period of more than two years.

The above are not the only cases of the kind that have occurred under my own immediate observation: I could mention several others of equal interest and importance, where men addicted to drunkenness have become reformed partly through the aid of Thomsonian treatment, which affords a pure stimulus, entirely free from intoxicating properties, and at the same time has the effect to correct and strengthen the digestive functions.

CHAPTER XV.

SECTION I.

HEADACH.

(*Ordinary Pain in the Head.*)

Pain in the head, in most instances, is occasioned by a disordered condition of the stomach.

Slight attacks of headach may very often be removed by having the head rubbed freely with the hands, which favours the returning circulation from the head. Bathing the forehead with some volatile stimulant, as No. 6, spirits of camphor, or hartshorn, or with simple vinegar, or whiskey, will sometimes remove it. When the feet are cold, they should be warmed by the foot bath, or by other means, and the patient take composition or pepper tea. Snuffing composition, or No. 6, up the nose, by stimulating to excitement the secretions of the mucous glands, will sometimes cure simple headach.

When the pain is violent, and not relieved by the means already mentioned, an emetic, or the repetition of three or four stimulating injections to relieve the bowels and attract the circulation from the head, will seldom fail of curing the pain.

SECTION II.

SICK HEADACH.

When there is pain in the head, attended by sickness at the stomach with or without vomiting, it is termed sick headach. It always arises from a disordered condition of the stomach; patients almost always experiencing much relief from the pain in the head after free vomiting.

In many instances sick headach occurs periodically; in some the attacks come on every week, in others at intervals of two or three weeks. Persons predisposed to this form of disease are especially liable to an attack from some change of habit, for instance, missing a regular meal, riding in the cold, or sitting some hours in a crowded assembly. Inaccuracies in diet, fatiguing exercise, exposure to cold, and getting the feet damp, frequently occasion an attack of sick headach.

Treatment.—The best remedy for sick headach is an emetic. This taken in the commencement of the attack will not only moderate the symptoms, but, very generally, after the free operation of an emetic, all the distressing symptoms will be speedily removed. If the feet be cold, apply the warm foot bath, or vapour bath, and let the patient take a dose of composition or pepper tea before the emetic be given.

Injections.—I have known sick headach speedily cured by the use of injections alone. Prepared in the usual form of composition or pennyroyal tea, adding a teaspoonful of lobelia, the injections will relieve the pain in the head, and, if applied in the onset of the attack, will never fail of proving beneficial.

In milder cases, and when the stomach is not very materially disordered, it may be sufficient that the patient get to bed, drink some warm tea, and have warm applications to the feet.

Sleep.—When a patient can obtain a few hours' sleep, the headach is generally cured for the time, whether they have or have not taken medicine previously. The practice, however, of taking an emetic in the commencement of sick headach, and repeating it every time that there are symptoms of an approaching attack, will not only prove the most effectual means for relieving the symptoms, but if the practice be persevered in, and medicine be taken to strengthen digestion, the liability to the attack will be greatly

lessened, and in most cases the patient will be freed altogether from the attacks.

Bitter Tonics should be taken once or twice a day, more especially after dinner. Wormwood, centaury, balmony, golden seal, quassia, or almost any combination of bitters may be employed. It is the tonic principle that is needed, and it is not important that any one particular article should be employed in preference to others.

Alkaline Bitters.—Take a handful of wormwood, and a tablespoonful of hickory ashes, pour on a pint of boiling water; a wine glassfull to be taken after meals, cold. This preparation is applicable in cases of heartburn or sour eructations.

Quinine.—There is strong evidence in favour of the use of quinine as a preventive and cure for sick headach. It may be employed in the place of all other tonics, after the stomach has been cleansed by an emetic, and the patient is clear of fever. It has been used recently as a preventive to sick headach with remarkable success. The proper time for taking it as a preventive is a day or two before the attack is expected; or, if the patient be not feverish and the tongue not thickly coated, it may be taken freely in the commencement of the attack. The dose from 6 to 20 grains. Quinine pills in general contain about one grain each.

Salt and Vinegar.—A disordered condition of the stomach will in some instances be rectified and digestion restored by the use of salt and vinegar. In these cases patients have an inclination for acids.

Costiveness almost universally attends sick headach. The majority of patients take some kind of purgative medicine to remove costiveness, which leaves the bowels in a worse and weaker condition than they were before; the costiveness continues and more physic is taken, and in this way many persons continue this practice for a succession of years until finally the digestive powers become so much weakened, and the functions of the bowels prostrated to such a degree that without a most careful attention to diet, a natural passage from the bowels is seldom procured. It is indeed doubtful which has done the most injury to the human constitution, the use of purgative medicine or spirituous liquors Costiveness is occasioned by a weakened condition of the functions of the bowels, and to assist and strengthen the peristaltic action of the bowels, and excite the secretions of their mucous membrane, are the essential indications for the cure of habitual costiveness. In many instances this may be effected by the daily use of bread made of unbolted wheat flour,

or by taking every evening for supper a gruel, or mush made of the same material, and avoiding the use of cathartics. The bran is supposed to act as a mechanical stimulus. Where costiveness is attended by heartburn or sour eructations, finely pulverized charcoal will be found especially beneficial; purified charcoal should be used when it can be obtained. The dose is a large teaspoonful taken in composition or spiced bitter tea, or it may be taken in boiled milk. It should be taken an hour or two before meals.

Capsicum taken freely at meals or immediately after, will stimulate the action of the bowels, and, in many cases of constipation, will be sufficient to overcome it.

Injections.—Where the use of purgative medicine has been continued for a succession of years, it may be necessary, besides the means above mentioned, to assist the bowels occasionally by the use of the syringe. There is probably not a case of obstinate constipation of the bowels, in which the mucous membrane of the bowels is not coated with thickened secretions—forming a complete false membrane, which occasionally passes off in long pieces, somewhat resembling an intestine. The removal of this false coating from the mucous membrane of the bowels is essential to the restoration of their natural functions. Purgative medicines operate upon the bowels as a foreign substance,—something not congenial; and provoke an action—an effort to cast off the offending substance, causing the mucous surfaces to throw out a coating of thickened secretions to shield them from the deleterious impression of the cathartic; therefore cathartics instead of cleansing the bowels of "canker" as Dr. Thomson expresses it, give the canker a deeper hold, and thus add to the difficulty. That which is required for cleansing the lining membrane of thickened morbid secretions or canker, is to excite the bowels by pure stimulants, capsicum, composition, and compound lobelia pills; and the use of stimulating and astringent injections.

Patients subject to attacks of sick headach should use the precaution to dress very warmly whenever they ride out in cold or damp weather. With regard to headach being occasioned by getting the feet damp, too few persons in the community are fully sensible of the influence which dampness applied to the feet, exerts over the digestive functions, and of the extent of derangement which it frequently occasions.

Another Variety of Headach.—Severe pain in the forehead and eye-balls, is sometimes occasioned by disease of the frontal sinuses which are small cavities in the bones of the skull, immediately above the eye-brows. These small cavities are lined with a mucous membrane which is continuous with the mucous membrane

of the nose. The disease is occasioned by taking cold; and prevails during the cold and damp weather of spring and autumn. The disease is in no wise dangerous, but sometimes continues several days, and occasionally for weeks before the pain is removed. In the first place the mucous membrane is weakened by the influence of cold, inflammation ensues which terminates in the free secretion of a thick, yellow or greenish matter which is discharged by the nostrils, and then the pain usually subsides.

Treatment.—Besides constitutional treatment, such as taking freely of warm stimulating teas, to favour perspiration, benefit will be derived from breathing through the nose, the vapour of vinegar and water, and using the composition powder, or cayenne pepper as a snuff, which will excite the secretions, and in this way afford relief.

Not unfrequently this form of headach is accompanied with a deranged condition of the system generally, the affection in the head being a mere branch of disease, the root of which is in the stomach and bowels. Hence in violent cases of headach, accompanied with symptoms indicating a disordered condition of the stomach and bowels,—a furred tongue, loss of appetite, bad taste in the mouth, costive bowels, and chilliness, and flashes of heat—the system must be warmed by the use of stimulants internally; and external warmth applied either by warm bricks placed around the patient or a vapour bath, administered, followed by an emetic to cleanse the stomach, and if the bowels require assistance let it be done by enemas. After this the patient may take occasionally of some stimulant—composition, spice bitters, ginger, or simple herb teas, and avoid exposure to the cold or dampness.

I have never known a case of headach that was not either cured or greatly relieved by administering a vapour bath and emetic.

SECTION III.

TOOTHACH.

The curableness of toothach by local applications depends upon the condition of the tooth and the cause of the pain. Thus, if the tooth be hollow, and the pain arise from the presence of acrid matter in the decayed part, or from exposure of the nerve to cold, the pain may be greatly relieved by filling the hollow of the tooth with cotton wet with the third preparation of lobelia, oil of cloves, spirits of hartshorn, No. 6, or spirits of camphor; together with

warm applications to the cheek, such as bags of hot ashes, salt or sand, or a towel folded up and applied as hot as can be borne. When a dry heat does not answer the purpose, a small bag of hops or of bitter herbs damped with vinegar, or cloths wrung out of hot water, may be applied.

Toothach may be cured, in many instances, by placing the feet in warm water, and taking freely of composition or pepper tea. In violent cases an emetic should be given, followed by broken doses of lobelia; stimulating teas and warm applications to the feet. A very intelligent and experienced Thomsonian once told me that he generally prescribed a dose of the third preparation of lobelia for toothach, and said that it seldom failed of removing the pain.

It very often happens that an abscess forms at the extremity of the root of a tooth which finally swells out the gum, forming what is commonly called a gum bile. External applications are seldom of permanent benefit in such cases, the only certain cure is the extraction of the tooth. After the abscess discharges, the pain generally vanishes. When a tooth has become diseased at its root, it will most probably be a frequent source of annoyance as long as it remains in the jaw, as plugging will seldom answer any good purpose in such cases.

Whenever teeth begin to decay externally, they should be plugged by a dentist well acquainted with the business. Persons residing in the country are too apt to neglect their teeth when they begin to decay, and do not apply to a dentist until they experience the disadvantage of the loss of some of their teeth and the partial decay of others. A skilful dentist can generally prevent the further decay of a tooth if timely applied to. Although the teeth may be preserved by plugging them, they are often injured by too much filing. Dentistry, like the Thomsonian system, has been greatly abused by quacks, who have engaged in it without being acquainted with its principles. A dentist properly acquainted with his profession will be very cautious how he uses the file, knowing as he does the importance of preserving the enamel of teeth, and of the liability of a rapid decay of them when a portion of the enamel is destroyed. I have known individuals condemn dentistry altogether; because they have observed their teeth to decay more rapidly after having had them filed. It is quackery in dentistry that should be condemned, and not the principles of the science. There is scarcely a branch of science the principles of which can be more plainly demonstrated than that of dentistry.

Having made allusion to *Thomsonian quacks*, I will explain myself; not meaning to be understood as applying this term to every one who engages in the practice without having had a regular medical education,—indeed, some of the most successful practitioners that I have ever yet known, have been men without a regular medical education—who have established a correct method

of reasoning upon things in general, and possessing good common sense, were able to comprehend the true principles of Thomsonism by reading the works of its founder, and possessed of sufficient moral courage to pursue the treatment thoroughly and perseveringly, as their mature judgment dictated, uninfluenced by the slander of gossips, the opposition of the prejudiced, or the timidity of professed friends. I would apply the term quack to one (whether he have been educated in a college or on a farm) who announcing himself a *Thomsonian doctor*, and railing against all mineral poisons, employs mandrake and other vegetable poisons, and deleterious compounds, as improvements on the Thomsonian system; and who instead of being governed in his practice by the general principles of the Thomsonian system, declares independence of Dr. Thomson's system, and employs inefficient syrups, and worse than useless cathartics in the place of Thomsonian medicines. Such practitioners may very properly be termed quacks in medicine.

DISEASE OF THE EAR.

SECTION IV.

EARACH.

This distressing complaint is of frequent occurrence. It prevails most in early life.

Causes.—Pain in the ear is generally a consequence of exposure to cold and dampness. Those who are predisposed to this form of disease, are extremely liable to an attack by getting their feet damp. Children are peculiarly subject to a discharge of matter from the ear, and they generally suffer more or less pain for several days before the ear begins to discharge, attended with a flushed countenance and some degree of fever.

Treatment.—When earach is caused by cold, it may be relieved by steaming the side of the head and using the warm foot bath. Steam may be applied to the ear through a funnel placed over a vessel containing boiling water. If there should not be sufficient steam, a small hot stone should be put in the water.—After the steaming, a portion of cotton wet with the tincture of lo-

belia, should be kept in the ear, or dry cotton may be employed if the tincture cannot be readily obtained. The heart of a roasted onion put in the ear will sometimes relieve earach: it should be hot, or as warm as can be borne. If there should be an abscess forming, the same course of treatment may be pursued; or apply a warm poultice to the ear, cloths wrung out of hot water, or a bladder partly filled with warm water, with a view to hasten a discharge of the matter. Syringing the ear with warm soap suds will sometimes relieve the pain.

If the system be much disordered, an emetic will be beneficial, after which, broken doses of lobelia may be given in order to cause a moderate degree of relaxation of the system, and to equalize the nervous influence.

In violent cases, more especially if accompanied with fever, injections should be resorted to, and the system placed under the influence of lobelia.

The compound lobelia pills may be used in all cases where the patient can take pills readily. Free vomiting may be effected by taking freely of these pills.

How to get a Bug or Fly out of the Ear.—When any kind of an insect gets into the ear, the patient should lie the head down on the side, with the ear that contains the animal uppermost, and have oil poured in the ear. The bug will come to the top of the liquid and be easily removed.

SECTION V.

RUNNING OF THE EARS.

A discharge of matter from the ears is by no means uncommon in children. Those of a scrofulous constitution are more liable to it, still it is often observed in children who are not predisposed to scrofula.

This disease occasionally injures the hearing, though more commonly it is not attended by any permanent injury to the hearing, even though the discharge continue at intervals during a period of several years.

The running, in many instances, is from the parts immediately below the cavity of the ear. In the first place a small abscess is formed near the cavity of the ear, and breaks into it, and is thus

discharged. In other instances the disease is confined to the membrane lining the cavity and drum of the ear.

Treatment.—When a child of a weak and delicate constitution is affected with running from the ear, a permanent cure is rarely accomplished until the general health be improved. It is, therefore, of more importance in such cases to use means for improving the constitutional health, than to depend upon any applications to the ear.

There are no means so effectual for improving the health as an occasional emetic, or a full course of medicine. If the tongue be coated, a strong tea of bayberry must be given once or twice a day, or in place of this use No. 3 pills.

Whenever the patient is suffering pain, or is feverish, give broken doses of lobelia, either in the form of tincture or pills.

If the running from the ears should stop and the patient complain of pain, or if it be a young child, and become restless and feverish, apply a warm poultice to the ear, cleanse the stomach by giving an emetic, relieve the bowels by injections, and give lobelia in broken doses.

Pipsissawa.—A strong tea or syrup of pipsissawa, may be used with benefit in this and other forms of disease in children, more especially in scrofulous constitutions.

Yellow dock, *sarsaparilla*, and *guaiac shavings*, combined in equal portions, simmered an hour, and then strained, sufficient sugar added to form a syrup, and then simmered again, forms a useful syrup in all cases of running sores in children, more particularly in cases where the disease has been of long continuance. The dose of the syrup is from a tablespoonful to a wineglassful, according to the age of the patient.

Tonics.—When the discharge is profuse, and the patient debilitated, the spice bitters, or some other form of tonic, must be employed, unless the syrup above mentioned be found sufficient.

Local Applications.—Syringing the ear with Castile soap and water, or with a strong tea of bayberry, will be beneficial. A strong tea made by steeping in boiling water a compound of bayberry, aspen, poplar bark, and gum myrrh, will not only serve to cleanse the parts, but will strengthen the healing efforts of nature. Many persons doubt the propriety of syringing the ear with stimulating teas, supposing that they may be carried into the head. The drum of the ear, which is not more than an inch and a half from the external opening of the ear, forms a barrier to the passage of substances beyond it.

When the discharge has been long continued, No. 6 alone, or combined with about an equal quantity of bayberry or poplar bark tea, should be dropped into the ear two or three times a day, or if this be very painful, a simple tea or tincture of myrrh, may be used, either of its usual strength or diluted with water, or bayberry tea.

In some instances the matter discharged is so acrid, that it excoriates the ear, causing the surface of it and the parts below the ear to be continually sore and inflamed; the glands back of the ears and on the side of the neck are apt to be more or less swollen; and sometimes an eruption appears over a part of the head and face, which very often continues for weeks, and sometimes it requires several months for the eruption to be entirely cured. Where the external ear becomes excoriated, or sores break out on the skin, the parts must be kept from the air by the application of tar ointment, or some kind of adhesive salve, in order to protect the raw surface from the atmosphere. Apart from constitutional treatment there is nothing of more importance in the cure of eruptions, of the character above mentioned, than to protect the parts from the action of the air. It does not make much difference what kind of salve or ointment is used, provided it will effectually exclude the air. In most instances the parts suppurate and discharge freely soon after applying a salve or ointment, but by continuing the application, so as to keep off the air, the parts will soon heal, unless the system be much diseased, and the healing power of the constitution thereby enfeebled. When the parts suppurate freely, the ointment or salve will of course require to be removed daily, in order to cleanse the parts, but the exposure should not be continued longer than is necessary to dress the sores. Such eruptions should never be dried up by the application of lead water, or driven into the system by the use of salts, or other such cooling medicines. For although they might not be followed by immediately bad effects, yet serious consequences have often resulted by applying lead water, or a solution of corrosive sublimate to eruptions on the face and head; and by drawing the determining powers from the surface by purging. Hence some physicians advise parents to use no means to cure eruptions about their children's heads, considering the eruption as a safe-guard against internal disease of far more serious consequence. I have never known any bad effects to arise from curing eruptions about the head upon the Thomsonian plan. The internal remedies used for curing the disease, will also prevent it from seating itself in the system.

In children of scrofulous constitution, the bones about the internal parts of the ear are occasionally diseased, occasioning an extremely offensive watery discharge, and the cavity of the ear sometimes becomes filled up for a time with proud flesh. Such cases generally prove obstinate of cure under even the most judi-

cious treatment, the patient being in most instances subject to frequent spells of violent headach. Nothing will give so much relief in such cases as thorough vomiting, and keeping the patient relaxed with lobelia.

It is not difficult to discover wax in the ear, when it exists in a quantity sufficient to injure the hearing, by having the patient to hold his head in such a position as to admit the rays of the sun to strike upon the drum of the ear, the cavity of the ear being made more straight and open by raising the ear upwards and outwards. A lighted candle in a dark room will answer to examine the ear.

Galvanism.—When dulness of hearing is occasioned by obstruction in the nervous circulation, the application of the galvanic battery may prove of utility. A very convenient apparatus has recently been constructed by a Mr. Code, of this city, called Code's Patent Graduated Electro-Galvanic Battery. With this machine the galvanic fluid may be applied to any part of the system with perfect safety.

SECTION VI.

DEAFNESS AND DULNESS OF HEARING.

Deafness, or dulness of hearing, may depend upon palsy or other diseased condition of the nerve of hearing; thickening of the drum of the ear; or it may proceed from disease of other parts of the internal apparatus of the ear. Hardness of hearing, very frequently, depends upon a collection of hardened wax in the drum of the ear.

Complete deafness is very rarely cured. When hardness of hearing is occasioned by indurated wax in the ear, it is very easily remedied by syringing the ear with warm soap suds, made of Castile, or palm soap. A convenient way to syringe the ear, is to have the warm suds in a basin, with one edge of it placed against the neck immediately below the ear, and inject the liquid into the ear, with sufficient force to reach the further extremity of the cavity. The syringing to be continued until the wax softens and is washed out.

CHAPTER XVI.

SECTION I.

PALPITATION OF THE HEART.

An irregular beating, and fluttering motion of the heart, very frequently attends dyspepsia, sick headach, neuralgia, asthma, consumption, hysteria, gout, constitutional debility; and in persons of nervous temperament, it is frequently occasioned by any slight derangement in the system. The use of strong coffee or tobacco; an oppressed condition of the stomach from food that is hard of digestion; grief, anxiety or any sudden emotion of the mind will in some, occasion irregular throbbing and fluttering motions of the heart.

Of all the cases of irregular palpitations of the heart, there is probably in nine of every ten of them, no disease of the heart; the irregularity of the motions of the heart being caused by a weakness and derangement in the nervous system. A disordered state of the stomach weakens the nervous power, and the weakened condition of the nervous influence may occasion disorder of the functions of the heart, constituting what is termed a functional disease of the heart. Thus sick headach and palpitation of the heart are often associated; both arising from the same cause: a diseased condition of the stomach.

Treatment.—Palpitation of the heart being in most instances merely a symptom of disease, the original cause of which is a disordered condition of the stomach, it does not demand any especial treatment, apart from that which is required for correcting the disordered condition of the stomach, and restoring digestion. Thus a patient may have an attack of hysteria, accompanied with violent pain in the head, and palpitation of the heart—these being mere symptoms arising from constitutional disease, the seat of which is commonly in the stomach, the same course of treatment will be sufficient to remove all these different symptoms. If ten thousand persons were to become diseased from one general cause, there would probably not be two cases in which all the symptoms of disease would be precisely alike. Whilst in one there might

be sick headach with palpitation of the heart, another might have palpitation of the heart without sick headach, and another sick headach without the irregular throbbings of the heart. Asthma in one would be accompanied with fluttering of the heart, in another it would be accompanied with headach alone, whilst the majority would probably be exempt from any functional derangement of this organ. Disease of every variety is produced by a weakened condition of the *principle* of life, and notwithstanding the great diversity in the symptoms which are presented in the various forms of disease, the general indications of treatment are few, and the necessary remedies also are few and simple.

If palpitation of the heart be accompanied with manifest symptoms of a foul stomach, an emetic will be the best remedy; which should be preceded by the vapour, or the warm foot bath.

When irregular palpitation of the heart becomes of so frequent occurrence as to need especial attention, the indications of cure, are, to restore the natural balance of the circulation of the blood, to cleanse the stomach and bowels of "canker" and strengthen digestion. This will prevent the heart from becoming permanently diseased in its structure, a circumstance which sometimes occurs in consequence of long continued palpitation of the heart depending upon constitutional disorder, and general debility.

Persons of full habit of body, whose digestive powers are enfeebled by a long-continued course of excesses in eating and drinking, and the inordinate use of tobacco, are very liable in advanced life to frequent attacks of strong, irregular throbbing, and tremulous motions of the heart. I knew an instance where a gentleman was confined to the house several months, labouring under symptoms of disease of the heart, yet by the free use of Thomsonian remedies, consisting chiefly of capsicum, a compound of the astringent or anti-canker medicines and bitters, he recovered perfectly from all symptoms of this disease.

Palpitation of the heart sometimes depends upon a weakness and soreness in some portion of the spine, the stomach not being materially disordered. Here it will be proper to employ the vapour and shower bath, stimulating applications to the spine, together with such constitutional treatment as the condition of the general health may demand.

A young lady, of Frankford, was affected with palpitation of the heart to such a degree, that for several weeks she could not lie down at night. Her digestive powers were prostrated, and there was extreme tenderness in the spine between the shoulders. A course of medicine was administered as often as once a week, a pepper poultice applied to the spine, and tincture of lobelia given in small doses, frequently repeated. The patient's general health was restored and no inconvenience felt from irregular action, or violent throbbings of the heart.

SECTION II.

ORGANIC, OR STRUCTURAL DISEASE OF THE HEART.

The preceding section treats of functional derangement of the heart, unattended with a change in the structure of the heart itself. Under the present head I shall make some brief observations in relation to structural disease of the heart, and point out the appropriate treatment.

The heart, like other organs of the body, is liable to changes of structure, such as an enlargement of its dimensions, with unusual thinness of its walls, enlargement of the ventricles of the heart, disease of the valves, the formation of cartilage within its cavity, &c., all of which depend originally upon a disordered condition of the system, or upon an originally feeble organization. Violent mental emotions have been observed to cause disease of the heart. Instances have occurred in which sudden terror, anger, or excessive joy, has determined the blood so vehemently to the heart as to cause immediate rupture of its ventricles."

Of the Symptoms.—Many of the symptoms which attend disease of the heart, also accompany other forms of disease, so that even experienced physicians sometimes find it difficult to distinguish disease of the heart from mere sympathetic derangement.

Asthma is very frequently attended by palpitation of the heart; and again, structural disease of the heart is accompanied by difficult respiration resembling asthma. Patients affected with disease of the heart experience great oppression and difficulty of breathing on using exercise; the same symptoms attend on asthma and dropsy of the chest; and even when patients are *extremely feeble*, and without being affected either with asthma, dropsy, or disease of the heart, they are liable to experience great oppression in the chest, difficulty of breathing, and violent palpitation of the heart from over exertion. The livid hue of the lips observed in cases of heart disease, alike accompanies paroxysms of asthma. The inability to lie down, however, only continues during a paroxysm of asthma; whereas in disease of the heart it is generally continued, or at least the patient can seldom lie on the right side, with the head on a level with the body; the same, however, attends hydrothorax. The pulse, which is irregular in structural disease of the heart, is also intermitting in functional disease of the heart, and also in other varieties of disease. Alarming dreams and sudden

startings during sleep, with a distressing sense of suffocation, which are mentioned among the symptoms attending disease of the heart, are by no means peculiar to that form of disease alone.

"When we find a patient complain of more or less habitual dyspnœa," (difficulty of breathing) "greatly aggravated by corporeal exertion; slight œdema, (dropsical swelling) of the feet: a puffy and anxious appearance of the countenance, with a livid hue of the lips; frequent palpitations or tremulous action of the heart during the paroxysms of dyspnœa; the occasional sudden occurrence of an elastic puffy swelling of the lower eye-lids and the upper lip; an irascible temper; quick and short inspirations; a deep purple and bloated aspect of the face during the paroxysms of difficult breathing; with an absence of the peculiar wheezing and rattling noise in the lungs; and a free secretion of urine: when these symptoms are noticed, we have strong reasons for presuming that there exists some disease of the heart."—*Eberle.*

One acquainted with the sound of the heart's beating in a healthy state, by placing the ear to the chest in the region of the heart, may by this means detect organic or structural disease of the heart, more especially when the disease consists in a cartilaginous or bony structure of portions of the valves of the heart.

Difficulty of Cure.—The majority of cases of confirmed structural disease of the heart, are probably incurable; yet by especial care on the part of patients to avoid excesses of eating, drinking, exercise, &c., together with the employment of means to support the natural warmth of the body, by which the determining powers will be kept to the surface, and the blood caused to flow to the extremities, and thus be prevented from being confined to the internal vessels crowding upon and oppressing the heart, the symptoms may be much relieved, and in some instances cures have been effected even when the disease had assumed a very serious character. When death takes place from disease of the heart, it is generally very suddenly, and sometimes without any previous symptoms indicative of more than usual danger.

Treatment.—An important indication in the treatment of disease of the heart, is to maintain an equal circulation of blood throughout the system. The means to be employed are the warm foot bath, the vapour bath, pure stimulants taken into the stomach, stimulating enemas, frictions of the surface, stimulating liniments, or embrocations applied to the extremities, and lastly, yet of still greater importance, the administration of an occasional course of medicine. The continued use of broken doses of tincture of lobelia, will prove beneficial. If the system be in a relaxed condition, and the complexion pale, bitters must be also employed.

Case.—A young man, by the name of Bullock, who was labouring under disease of the heart, of a severe character, the throbbings of the heart being constantly violent, and irregular, and his flesh much wasted. The physician who attended him was a man of considerable eminence in the profession, and declared the case to be an incurable disease of the heart. It was proposed to the physician that the patient be taken to the country. He replied that it would be altogether useless, as the disease was of that character which afforded no grounds for hope of recovery. Under these discouraging circumstances, the patient was taken to a Thomsonian infirmary, which was under the superintendence of Frederick Plumer, and there he had a course of medicine administered to him every few days. Under this treatment he improved so much that after the twentieth course of medicine was given, he was almost free from symptoms of disease of the heart. This gentleman subsequently regained perfect health and engaged in the study of law, and now resides in one of the southern states.

In another instance a gentleman past his fiftieth year, who had been a *full liver*, was confined to the house several months with well marked symptoms of disease of the heart. By a careful avoidance of all injurious influences, and the continued daily use of Thomsonian remedies, this patient became entirely free from symptoms of heart disease, his general health being fully restored.

The above are the only cases of disease of the heart (admitting them to have been of that character) in which to my knowledge the effects of a persevering and well applied course of Thomsonian treatment in this disease has been fully tested.—The tendency of Thomsonian treatment in equalizing the circulation, and improving the general health, and the remarkable influence of lobelia in equalizing nervous energy even when administered in small doses, affords sufficient ground to warrant confidence in the practice even though the disease may heretofore have baffled the treatment pursued by the medical profession.

Excesses of every kind to be avoided.—Persons labouring under disease of the heart, cannot observe too much caution in the avoiding of excesses, in eating, drinking, and in exercise. If the stomach be oppressed with too much food, or by the food being hard of digestion, it will more or less disturb the equilibrium of the circulation of the blood, and thus increase the disturbance in the regular action of the heart. Much the same effects will be produced by exposing the feet to dampness which causes the blood to recede from the surface and oppress the heart. Too much exercise is apt to occasion great distress at the heart, with violent palpitations.

Many persons may question the propriety of administering a course of medicine to a patient labouring under disease of the heart. Experience has proved, however, that a patient affected with disease of the heart who is unable to walk a square, without experiencing the greatest distress and difficulty of breathing, will go through a full course of medicine without affecting him in this way, to any considerable degree. During the winter of '38 I was requested to visit a Mr. Kates, who was labouring under a most severe form of disease of the heart. The case was utterly hopeless of cure, his legs were dropsical, requiring to be punctured every few days to drain off the fluid; there was an accumulation of water in the cavity of the abdomen; he was extremely emaciated, and the action of the heart continually violent, labouring and irregular, so that it was with difficulty that he could walk a few steps without support, and he was compelled to continue night and day in a sitting posture. I commenced treating the case with a view only of affording relief, and after applying the steam bath daily, which he bore very well, and having taken composition tea, occasionally, three or four days, I administered a full course of medicine, and did not perceive any unusual excitement or increased difficulty of breathing during the operation; not even immediately after vomiting. This circumstance admits of a ready explanation, namely: the means employed equalized the circulation of the blood, and thus prevented it from crowding upon the heart. Thus a patient labouring under a paroxysm of asthma, who is unable to walk across a room, or scarcely to stand erect, will be materially if not entirely relieved by a thorough emetic, and still more certainly by a full course of medicine.

I attended a patient living in Woodbury, N. J., a man in advanced life, labouring under a most severe form of asthma, attended with well marked symptoms of organic disease of the heart. It was with difficulty this patient could walk ten feet, and he had not lain down during a period of twelve months.—Every extra effort would cause violent throbbing and distress at the heart, still this patient would go through a course of medicine and feel much relieved during the operation. The course of treatment adopted in this case, which consisted chiefly of the free use of the third preparation of lobelia, given in a strong decoction of bayberry and sumac berries, repeating the dose whenever the symptoms of oppression were more distressing, together with the daily application of the vapour bath, warmth to the feet, the use of injections, and stimulating liniment to the surface, not only removed the asthma, but so far restored the natural action of the heart, that the patient in a few weeks after the commencement of the treatment, was able to walk a mile, without experiencing much inconvenience from the exercise.

To bleed and give poisonous sedatives, that will destroy the di-

gestive powers to lessen the action of the heart, is, to say the least, irrational.

The same course of treatment that is adapted to the cure of asthma, is precisely that which is required in disease of the heart or dropsy of the chest, so that however difficult it may be to decide the precise character, form or location of the disease, the indications of treatment are, to equalize the circulation, restore the natural warmth of the system, cleanse the stomach by emetics, the bowels by enemas, and strengthen digestion. A physician by long experience in the use of the stethoscope, may be enabled to form a very accurate opinion in relation to diseases of the heart. This kind of knowledge, however, does not teach us how to cure disease. A man may be a perfect anatomist, and yet be a very unsuccessful practitioner. A knowledge of the construction of the human system, and a knowledge of the laws of life are so distinct, that the one may be understood, without any correct knowledge of the other.

CHAPTER XVII.

SECTION I.

BLEEDING FROM THE LUNGS.

Raising blood from the lungs occurs under various conditions of them, and although it generally occasions alarm, it is not always attended with danger. Though generally connected with pulmonary consumption or with a predisposition to that disease, still frequent instances have occurred where persons have been subject to bleeding from the lungs, for many years, without much inconvenience; and, occasionally persons live to an advanced age who have been subject to these frequent discharges of blood.

The opinion so generally prevailing, that bleeding from the lungs is always caused by the rupture of a blood vessel is erroneous. Still this does occasionally happen, in the advanced stage of consumption in consequence of ulceration of the vessels. But in the great majority of instances the blood oozes through the infinitely small vessels which terminate on the lining membrane of the air passages; these vessels being in a relaxed, or otherwise diseased condition, are unable to resist the pressure of blood upon them. The same occurs in the lining membrane of the nose: the blood escapes from the mouths of the vessels without their being rup-

tured. The quantity of blood discharged varies greatly in different individuals; and, also at different periods, in the same patient.

A free discharge of blood from the lungs is usually preceded by coldness of the extremities; a sensation of tightness and oppression at the breast; distress at the pit of the stomach; palpitation of the heart; chilliness; agitation of mind; "alternate paleness and flushing of the face; and often a disagreeable salty or sweetish taste in the mouth."

To distinguish bleeding from the lungs, from bleeding from the stomach: observe that where blood is *vomited* it comes from the stomach; and when raised by haucking or coughing it is from the lungs. Clots of blood, however, may collect in the posterior naries, and be expelled by the same kind of effort, as though it were from the lungs.

Causes.—Bleeding from the lungs may arise from various causes, such as, the presence of tubercles in the lungs; exposure to cold and dampness; over-exertion; disordered stomach; "the suppression of habitual evacuations; and obstructions in the liver, or spleen.

Rarely proves fatal.—Patients seldom die of bleeding from the lungs; for although the bleeding may be profuse, it is seldom so great as to destroy life at the time. Frequent copious bleeding from the lungs, however, may occasion such a degree of debility and coldness of the system, that dropsy, consumption, or marasmus, will ensue, and which may prove incurable.

Treatment.—The important indications for checking the escape of blood from the lungs, is to equalize its circulation throughout the system. An undue accumulation of blood in the lungs is always attended by a corresponding deficiency in other parts.

In cases of slight bleeding, placing the feet in water as hot as can be borne, and drinking freely of hot composition tea, adding small portions of lobelia to excite perspiration, and assist in equalizing the circulation, may be sufficient to check the bleeding. But where this is not sufficient, a full course of medicine administered will prove the surest means of equalizing the circulation. If the patient be very feeble, hot bricks wrapped in damp cloths may be kept at the feet, in place of the vapour bath; and a prompt emetic given. I have never witnessed a case in which bleeding from the lungs continued, after the free operation of an emetic. The lobelia should be given freely, not only with the view to produce free vomiting, but also to relax the system. When the system becomes relaxed, the blood ceases to determine to the lungs in an undue quantity; obstructions in the capillary vessels are overcome; the nervous influence is equalized, and the force of the heart's contractions are moderated. The straining efforts to vomit will not in-

crease the determination of blood to the lungs, but will equalize its circulation. Stimulating injections containing lobelia, are especially beneficial, by the influence which they exert in determining the blood from the lungs. The patient must be kept quiet as possible, and avoid conversation. After the bleeding is checked the warm application to the feet should be continued, together with an occasional dose of composition to maintain an equilibrium in the circulation; and if the patient be feverish, or restless, add such a portion of the tincture of lobelia to the composition as will merely occasion slight nausea. Bayberry and sumac berries steeped in boiling water making a very strong tea, adding a portion of cayenne, sweetened, and drank freely, will be as effectual a remedy as can be taken, excepting the emetic.

Professor Chapman, in his lectures, relates the circumstance of his being called to attend a young man who was bleeding freely from the lungs, and as the doctor entered the room the patient vomited in consequence of a large dose of medicine that he had just taken, and the bleeding immediately ceased. The fact of the hemorrhage from the lungs ceasing when the patient vomited, together with the conviction that it admitted an easy explanation, induced the doctor to make a trial of emetics in similar cases. Accordingly in the next case that came under his care, which was that of a young woman who was bleeding profusely, and the usual means, salt, and acetate of lead, having failed, an emetic of ipecacuanna was given, which produced active vomiting, and the bleeding immediately ceased. The next case of the kind was that of a young woman who had been subject to raising blood, in consequence of suppression of menses. The usual remedies having also failed, the doctor resorted to an emetic, and with entire success: not only did the emetic check the flow of blood from the lungs, but it removed the obstruction which occasioned the bleeding. Dr. Chapman declares that more than thirty years' experience has convinced him that emetics are the most effectual means for checking bleeding from the lungs: rarely ever failing, and no danger attending the operation, when under the direction of a judicious practitioner.

In the advanced stage of consumption or when there is extreme prostration of strength, the patient should not be subjected to overexertion, either by getting up, or by conversation. It is in cases unconnected with deep consumption, that a thorough course of treatment will be more appropriate.

Persons not in deep consumption who are liable to attacks of raising blood from the lungs, by taking an emetic or a full course of medicine, as soon as there are symptoms which indicate approaching hemorrhage, it will in almost every instance prevent the bleeding; and this will not only be a means of preventing hemorrhage at the time, but will also prove the most effectual means of

restoring the general health, and thus remove the predisposition to raising blood.

Common table salt is a remedy generally resorted to for spitting blood, which together with placing the feet in warm water, will sometimes be successful in stopping the bleeding.

SECTION II.

EPISTAXIS.

(*Bleeding from the Nose.*)

Bleeding from the nose, as it usually occurs in young and healthy persons; or where it is caused by slight injuries, does not require particular attention. Confirmed into a habit, however, it is liable in weakly constitutions to bring on disease, by its draining the system of so much blood.

Bleeding from the nose often takes place during the active stage of fever, and more especially when it is attended with great fullness of the head.

From the frequent occurrence also of bleeding from the nose about the turn of fever, it is considered by many as a crisis symptom, and has been cited as an argument in favour of blood-letting in fever; but it should be recollected that the escape of blood from the nose is the *effect* and not the *cause* of the favourable change in the disease; the vessels of the mucous membrane of the nose being debilitated by disease, are unable to resist the force of the circulation, when it is restored to these parts, by the increase of vital power.

Bleeding from the nose occurs in a condition of the system the opposite to that above mentioned, namely: in the sinking stage of malignant diseases, as typhus and yellow fever: the blood apparently becoming dissolved and deprived of its tenuity, escapes from the vessels, they having lost their power of contraction.—This is an unfavourable occurrence, as it tends to reduce the already enfeebled strength of the patient.

Occasionally bleeding from the nose assumes a serious aspect, where it occurs in aged persons, and where there exists extensive derangement in some important organ, as the stomach, liver, spleen,

&c., sometimes proving, under such circumstances, extremely difficult of control.

Enormous quantities of blood are sometimes lost from the nose. From five to eighteen, and even thirty pounds have, in some instances, been lost in a few days. The bleeding, it is said, always ceases when the patient faints.

Treatment.—Persons predisposed to bleeding from the nose, should be careful to avoid all exciting causes, as exposure to cold, especially cold damp feet; heavy lifting, stooping with the head low, hot stove rooms, &c.

The indications of treatment in this are the same as in bleeding from the lungs, namely: to equalize the circulation, and give tone to the vessels from which the bleeding proceeds.

In its milder form, and where remedial means are deemed necessary, placing the feet in warm water, bathing the face in cold vinegar and water, or whiskey and water, and taking a dose or two of composition or pepper tea, will be sufficient.

Stimulating injections, containing a portion of lobelia, will always be found beneficial, and in obstinate cases, almost indispensable.

Pressing the sides of the nose together with the thumb and finger, opposite the bleeding vessels, will in common cases prove effectual, provided the pressure be continued a sufficient length of time to allow the blood to coagulate and block up the vessels.

If the pressure be made below the bleeding vessels, the blood will pass down the nostrils into the throat, the hemorrhage not being checked.

Holding the left arm up perpendicular will often stop bleeding from the nose. The column of blood in the arm pressing upon the aorta, lessens the determination to the head. This, however, has been advanced to explain the cause of the bleeding ceasing, by holding up the arm.

In cases of a more obstinate character, depending upon extensive derangement of the general health; or where it has become a confirmed habit, a course of medicine should be repeated at proper intervals, together with proper intermediate treatment, with injections, and the usual means employed by Thomsonians for improving the health.

The compound lobelia pills may be used as a general preventive to habitual bleeding at the nose.

The following is from Dr. Samuel Thomson's narrative.—"While at Exeter, I had a case of a young man, son of Col. N. Gilman, who was in a decline. He was about fourteen years old, and had been troubled with bleeding at the nose. They had made use of such powerful astringents, with corrosive sublimate snuffed up the nose, that the blood vessels in that part seemed to be

shrunk up, and his flesh much wasted away; I carried him through a course of medicine, which caused an equal circulation of blood throughout his body, then raised a natural perspiration, and restored the digestive powers so as to support the body with food instead of medicine. The bleeding from the nose ceased, and in a short time he recovered his health."

When bleeding from the nose occurs in an exhausted state of the system, with cool skin, flesh soft and flabby, and the countenance pale, besides the employment of means for equalizing the circulation of the blood, stimulating and astringent applications should be made to the bleeding vessels to excite them to contraction. No. 6, or the third preparation of lobelia, adding a portion of bayberry, may be introduced into the nose by means of a piece of cotton and a probe.

Burned Cork.—It is said that a quill filled with the ashes of burned cork and the ashes blown into the nostril immediately after cleaning out the clotted blood, has succeeded in arresting bleeding from the nose in some very obstinate cases.

Spirits of Turpentine.—When bleeding from the nose occurs in what is termed typhus fever, the following is a good remedy: a teaspoonful of spirits of turpentine, beat up with the yolk of an egg, and a teaspoonful of this given at a time to the patient, repeating every ten or fifteen minutes. Occurring, however, in the sinking stage of malignant forms of disease, when the blood has become apparently dissolved or deprived of its fibrin, but little benefit is to be anticipated from any remedy.

SECTION III.

BLEEDING FROM WOUNDS.

Cuts made by a sharp-edged instrument, bleed more than wounds of the same or even much greater extent, made by a rough-edged instrument, a saw, for instance; or when the parts are much bruised, the bleeding is seldom profuse.

Nature's method for stopping the flow of blood.—When an artery, or vein, is divided, the surface of the inner coat of the vessel

commences, throwing out a gluey substance which gradually fills up the cavity of the vessel, and prevents the further escape of blood. In this way the cavity of the vessel becomes gradually filled, so that in the course of half an hour, an artery or vein, the size of a small crow-quill, may entirely cease to bleed.—When a vessel is torn or bruised, its cavity becomes closed much sooner than when it is cut with a smooth instrument. Lacerated wounds seldom bleed long; and sometimes very extensive wounds of this kind are attended by very little bleeding from the commencement, even when large vessels are torn asunder.

Wounds about the extremities or in any part where the vessels are not larger than a crow-quill, seldom require the vessels to be taken up and tied, as they will become plugged up in the manner above described, without any serious loss of blood, provided advantage be taken of the position and pressure used.

Position.—In wounds of the extremities, for instance, on the hand or arm, that bleed freely, the parts should be held above the head; or if on the foot or leg, the patient should lie down and have the limb raised higher than the body.

Pressure.—Much may be done by pressure in arresting bleeding, more especially where the cut vessel is situated in bony parts, for here the pressure will be more effectual. Pressure may be made by a piece of sponge, or a compress of folded cloths held or bound firmly upon the parts, until the bleeding ceases.

When several small arteries are cut and bleed freely, for instance, on the hand or foot, the bleeding may be checked very much by placing a piece of cork over the main arteries on the wrist or angle of the hand or foot that is wounded, and bind the cork on firmly with a bandage.

Dr. Granville S. Woolman, of Rancocus, informs me he has frequently checked bleeding after extracting a tooth, by placing a little roll of cotton wet with spirits of turpentine in the cavity, and directing the patient to close the jaws; the roll of cotton being sufficiently large to make firm pressure upon the part.

Relaxing the system with lobelia will lessen the escape of blood from a wound, and in any case of bleeding, except in low forms of disease, when the tenuity of the blood is destroyed.

When an artery is cut, the blood will be thrown out in jets and its colour will be red; whereas when a vein is cut, dark blood is discharged.

Large veins may be checked from bleeding freely, by applying firm pressure on the vein above and below the wound. There is more or less danger to be apprehended from tying a vein; this

therefore is to be avoided, unless the vein be large and the bleeding cannot be checked by other means.

Large arteries that are cut require a ligature, unless the bleeding should not be very profuse. A person in full health may lose large quantities of blood, and soon have this loss restored, provided his digestion be not destroyed by the loss of blood. Whereas in disease where the digestive functions are prostrated the loss will not be restored for a much greater length of time; for new blood cannot be formed without chyle, and chyle is formed from food that is passing through the process of digestion.

Vessels on the head seldom require tying, as pressure can be effectually made upon them in consequence of the vessel lying near the bones of the head. Tying the vessels of the head is also apt to be followed by erysipelas, provided the parts have been bruised, unless great care be taken to protect the parts from the air.

An artery that is only partly cut off will bleed much longer than when it is completely divided. Hence when it is ascertained that a vessel is partly divided it should be entirely severed, which will enable the ends of the bleeding vessel to contract and retract, and to become filled up by the lymph which exudes from the inner coat of the vessel. If an artery or vein be partly divided only, it will be difficult for the vessel to become filled with lymph, so that even a small artery that is partly cut in two, may continue to bleed a long time. The only means of ascertaining whether a vessel be partly divided is by searching at the bottom of the wound by clearing away the clotted blood, and then applying a sponge to cleanse the wound so as to seize the vessel with a pair of forceps, and if it be found to be partly cut off let it be entirely divided.

Some surgeons recommend pinching and twisting the ends of bleeding vessels with a pair of forceps or tweezers, which cause the inner coat of the artery to throw out lymph more rapidly, filling it much sooner than would otherwise have been accomplished.

SECTION IV.

BLEEDING FROM THE STOMACH.

When blood is thrown up by vomiting, we know that it is not from the lungs. It may be occasioned by severe injuries of the stomach, or, the discharge of blood from the stomach may be occasioned by constitutional disorder. In females it is mostly con-

nected with obstructed menstruation; and in men it is sometimes the consequence of dissipation.

Treatment.—The same general course of treatment will be required in cases of bleeding from the stomach that is recommended for bleeding from the lungs. The important indications are to evacuate the stomach by emetics, stimulate the vessels of the mucous membrane to contract by giving stimulants and astringents; to relax the system with lobelia; and attract the blood to the surface and to the extremities by warmth applied externally.

To most persons, it may appear an improper practice to give an emetic in cases of bleeding from the stomach, but if the stomach be oppressed with a mass of blood there is no other means upon which any confidence can be placed but prompt emetics.

Professor Chapman in his lectures relates a case of a young woman who was seized with vomiting blood, and when he first saw her she had thrown up three pints of blood. Astringents and various other remedies were employed without effect; she became much exhausted and continued to throw up blood. An emetic of Ipecacuanha was given, and a large mass of black blood was thrown from the stomach, after which she revived, the bleeding ceased, and she done well. But for the emetic this patient would doubtless have died from the oppressed condition of the stomach. Other cases were related by the Professor where emetics proved effectual after the usual remedies had failed. In one instance the bleeding returned after the operation of the first emetic, a second was given, and after its operation there was no return of the bleeding.

CHAPTER XVIII.

SECTION I.

CANCER.

Cancer is a malignant disease, generally seated in the glands, though no portion or tissue of the body is altogether exempt from the liability to become diseased in this way. Thus the lips, tongue, skin, stomach, ovaries, uterus, and even the bones are subject to cancer.

Cancer, like tubercles in the lungs, is the consequence of a defect of the living principle in the part, together with a vitiated state of the constitution. A female in *good health*, receiving a bruise upon the breast, would soon recover from it, for if the flesh be so much injured as to destroy its vitality, the parts surrounding it will take on active inflammation, terminating in suppuration, and after the matter is discharged, adhesive inflammation heals the parts. Or if the parts be merely weakened by the bruise, adhesive inflammation will produce a hardness of the part, which, however, will disappear without the formation of matter. In a certain depraved condition of the constitution or defective organization, a bruise upon the breast, instead of being removed by one of the methods above described, namely: by means of inflammation, the part that is injured by the bruise does not take on inflammation but gradually becomes converted into a substance which operates as a foreign body in the system, the efforts of nature being insufficient to remove it by inflammation, or suppuration, it becomes converted into cancer.

Various kinds of tumours and indolent ulcers are often mistaken for cancers. Cancer doctors and doctresses are very apt to apply the name cancer to indolent sores and swellings, in order to gain a reputation for curing them; or probably from an inability to distinguish between true cancer and disorders that are not of that character.

It is observed that unmarried females and those who have never borne children, are most liable to cancer of the breast.

Cancer of the Female Breast.

Symptoms.—When first discovered, a cancerous tumour is usually about the size of a marble, and is extremely hard and moveable. The disease progresses very slowly, attended now and then with a sense of uneasiness in the part, but without inflammation of the skin. "Sometimes the attention is first attracted to the bosom by a drop of bloody serum having stained the linen opposite the nipple, it having flowed from one of the lactiferous tubes. Sometimes a distinct and sharp pricking pain leads to the discovery of the swelling."

There is rarely much pain felt in the part in the early stage of cancer, but after a time the patient experiences turns of excessive darting, or burning pains in the tumour, which are apt to occur at intervals of about two weeks. As the tumour becomes painful it is observed to enlarge, but true cancer rarely ever becomes larger than two or three inches in diameter, except when the disease invades the whole gland, rather than commencing in the form of a distinct tumour.

As the disease advances the paroxysms of pain become more frequent, and are often intensely severe as though "the parts were pierced with a knife or the nerves of the breast torn out." Prior to menstruation (about four days) the breast feels fuller, heavier, and much more painful.

After the tumour has attained a considerable size, which in some instances requires many months or even years, the nipple is observed to become shorter, being drawn in by the milk ducts, which are pushed out of their course by the tumour; "frequently also the nipple becomes red, inflamed, excoriated, and sometimes ulcerated." A change is also produced in the appearance of the skin; it is puckered so as to resemble a cicatrix, and this arises from its adhesion to the surface of the cancer. At this stage of the disease the parts around the cancer become more firm and harder than natural, and little tumours are generally perceptible in the parts surrounding the cancer. During the progress of cancer the glands under the arms almost always become more or less swollen and hard.

"*Exists for years without destroying life.*—Months, and sometimes years roll on, and the disease continues in its adhesive stage: and it may even destroy life without ever suppurating; but frequently it proceeds to a suppurative inflammation: then the skin appears of a livid redness; the pain becomes even more severe; a slight sense of fluctuation, or rather of yielding, is perceived in the part, which gradually ulcerates and discharges only a bloody serum; for true pus is not generated.—Pus is attempted to be pro-

duced; but it is not formed on a truly malignant surface, but only upon the surrounding parts, if they be ulcerated."—*Cooper.*

"*Character of the sore.*—The surface of the sore feels hard, like the original tumour, and is remarkably insensible to pressure; and you therefore will observe the patient wipe it and handle it with a degree of roughness and want of gentleness, which surprises those who are unaware of its little sensibility."—*Cooper.*

Cancerous ulcers are apt to bleed frequently. The bleeding may be checked by a compress of carded cotton, lint, or soft muslin cloths, applied to the part and confined by a bandage, so as to make moderately firm pressure upon the bleeding vessels. As the ulceration proceeds a deep cavity is formed, sometimes extending to the breast bone.

Patients affected with cancer are apt to complain of rheumatic pains in various parts of the body more particularly in the loins and thighs.

As the disease extends, the arm upon the diseased side becomes swollen; there is frequently much difficulty in breathing, the patient being unable to lie down; a sense of stricture and spasms at the pit of the stomach, is often experienced, and sometimes attended by vomiting. Finally the constitutional energies become exhausted and the patient sinks under the disease.

It should be recollected, however, that it is not every case of cancer that destroys life, even when the tumour is not removed. Sometimes the disease remains stationary for many years.

The female breast is very liable to tumours that do not partake of the cancerous nature. A cancerous tumour in the breast is rarely ever observed in females under thirty years of age.

Treatment.—The chief indication in the treatment of cancer is the employment of such means as are best adapted to improve the condition of the general health. An occasional course of medicine, together with the daily use of stimulants—cayenne, composition, or spice bitters, and broken doses of lobelia in pill or tincture, given every two or three hours constitute the remedies principally to be employed in the way of constitutional treatment.

If there be acidity of the stomach, and the bowels costive, pulverised charcoal will be beneficial. It may be taken prepared in composition or spice bitters tea. The dose of the charcoal is a large teaspoonful; to be repeated two or three times a day before meals.

When a violent paroxysm of pain comes on, it may be mitigated by the use of the warm foot bath, or of the vapour bath, and the use of enemas composed of some mild stimulant, such as weak composition or pennyroyal tea, with the addition of a teaspoonful of lobelia, either the powder, tincture or third preparation.

Whatever tends to equalize the circulation of the blood, and of

the nervous power, will relieve pain, no matter where it be situated. The free use of pure stimulants, cayenne and composition, containing small portions of lobelia, will also be useful in relieving paroxysms of pain.

Difficulty of breathing will be relieved by the treatment above mentioned. The same remedies are also indicated for the relief of the dry and harassing cough which often attends cancer, more especially in its more advanced stages.

Tonics will be proper with a view to strengthen digestion—such as spice bitters, balmony, &c.

Diet.—"It is supposed that a vegetable diet, and food affording little nourishment is conducive to recovery. There is no greater mistake. Whatever weakens leads to an increase of the disease, and to a more rapid termination of the existence. Low living, renders the person irritable, quickens the pulse, and makes the constitution feel the disease more strongly. Vegetable diet has not the least beneficial influence over this complaint."—*Cooper's Lectures.*

Applications to the tumour before the skin is broken.—During the earlier periods of cancerous tumors they should be kept warm, and the skin in a perspiration, by the application of some simple kind of salve spread on silk oil cloth, or by wearing a piece of rabit skin with the fur side to the breast.

Poultices are to be applied when the tumor softens and the skin becomes inflamed. The poultice may be made of elm, ginger, and cracker, or any soft emollient substance, adding a portion of ginger to render it moderately stimulating.

Local Treatment for Open Cancer.

Cancer.—Many *reputed* cures for cancer have been introduced into use in form of salves, plasters, and balsams, but which upon the whole have doubtless been of far more injury than benefit. Powerful caustic and corroding poisons, as preparations of arsenic, are applied by some cancer doctors, to almost every kind of indolent ulcer they meet with, and if it should heal, it is announced as a case of *cancer cured;* whereas in true cancer such applications would probably have little effect other than to irritate the parts and aggravate the sufferings of the patient, without accomplishing a cure.

Extract of Sheep Sorrel.—The use of this article appears to have operated very favourably in some cases of cancer. The extract is obtained by evaporating the juice of the sorrel, in tin or pewter plates set in the sun, until it acquires the consistency of tar. This

is spread on thin leather or silk oil cloth and applied to the cancer, renewing it daily. This article operates upon open cancers in the same way that Lounsberry's plaster mentioned below.

Extract of Red Clover Blossoms.—This preparation is recommended by Dr. Thomson as a valuable application in cases of open cancer. I cannot speak from personal knowledge of the efficacy of this remedy.

Caustics.—Small cancers situated in the skin, as in cancer of the lip, the frequent application of the caustic potash, or lunar caustic may succeed in removing them. After each application of the caustic, an emollient poultice or mild salve may be applied.

Lounsberry's Plaster.—A Baptist minister, by the name of Lounsberry, residing in Connecticut, prepares a plaster which appears to be gaining considerable reputation as a cure for cancer. I have witnessed the effects of this plaster in but one case of cancer, and I must say that I was much surprised and gratified at the effects produced.

The Case.—Mrs. Harding, residing in Second street, had a true cancer in her right breast, for which she had consulted the principal surgeons in the city, one of which advised its removal by an operation, whilst every other one that she applied to told her it was too late to operate. I had examined this tumour every week or two, during a period of two years after it had become an open cancer. Various kinds of plaster were employed, without affecting any change for the better. On the application of the plaster above mentioned, the cancer began to assume a different aspect, and in the course of a few weeks, a distinct division took place between the cancer and the living flesh, and finally the whole of the cancer came away, leaving a cavity, the surface of which had a healthy appearance.

Several months have elapsed since this cancer was removed, and although the parts are not entirely healed, yet there is no appearance of a return of cancer in the part. In this case, however, as it often happens in cancer, the constitution is contaminated with the disease, there having been for two years past symptoms indicating the existence of cancerous tubercles in other parts of the body, and which must eventually terminate fatally to the patient.

I do not know the composition of Lounsberry's plaster, yet I have observed that when it is applied to a raw surface, it does not corrode or even occasion inflammation. This plaster is

much less painful to the parts than cancer plasters are in general.

I should not recommend a secret medicine designed to be taken inwardly, but as this plaster does not appear to possess any deleterious quality, I should not hesitate to employ it. If there be a cure for cancer, it ought to be universally known.

With regard to the removal of cancer by the knife, it is certainly less objectionable than to have it destroyed by the application of caustic, unless the cancer be very superficial, and even then the knife would be less painful than caustic.

Cancer depending in the great majority of instances upon constitutional disorder, is seldom effectually cured by an operation. In four cases out of five the disease breaks out in another part of the body in the course of a year after the cancer has been thus removed. Cancers, situated in the skin may be effectually removed either by the knife, by the application of plasters, or by caustic, and sometimes the disease does not return even where the seat has been in a gland, for instance, in the breast.

CHAPTER XIV.

SECTION I.

INFLAMMATION.

Inflammation is a restorative action instituted by the constitution to sustain the organization of parts, to heal wounds, and repair injuries. Thus if a bruise be inflicted upon a part, an inflammatory action is established to restore the part to a healthy condition; wounds are healed by the same means; if a splinter be lodged in the flesh inflammation is established by which matter is formed around the splinter, separating it from the living parts.

The general object, therefore, to be kept in view, in the treatment of inflammation, is to favour the restorative actions, by the use of such means, as will aid in bringing the parts to a healthy condition. Thus on the surface of the body, cooling applications, and emollient poultices, are adapted to the early stage of acute inflammation from injuries, boils, &c., but not in erysipelas. Too great an amount of blood in a part, occasions unnecessary pain and retards the curative action; and on the other hand, there may be too

little blood and nervous energy to sustain and carry on the actions necessary for the restoration of an injured part, requiring the use of stimulating applications, and such dressings as will prevent evaporation.

A wound cannot heal without inflammation, except in case of a smooth cut by a sharp instrument, and the wound be immediately closed so as to exclude the admission of air into it. In order to repair an injury, the part must receive a greater supply of blood than is natural to it when in a healthy condition. The blood furnishes the substance that unites wounds.

"Inflammation may be considered as a genus, of which there are many species. It may be divided into healthy and unhealthy. The healthy is that which will always take place in a healthy constitution or part, and is rather to be considered as a restorative process than a disease. Unhealthy inflammation is that which takes place in an unhealthy constitution or part, and will vary according to the kind of unhealthiness of that constitution or part."—*Hunter.*

A wound that heals readily in a healthy constitution may in a vitiated or disordered condition of the health become a very troublesome and protracted sore. If a person in good health receive a bruise, so severe as to destroy the vitality of a portion of flesh, the first step which nature takes for repairing the injury is to direct an increased supply of blood to the part, and set up an inflammation in the injured parts, occasioning increased heat, with redness and swelling. The inflammation causes the cells of the cellular tissue to become blocked up, and thus forms a barrier, which protects the surrounding parts from being injured by the dead flesh. The flesh feels firm, and the swelling is circumscribed, as is observed in the case of a common bile. The next point is to remove the portion of flesh which was killed by the bruise. This is accomplished by means of an inflammatory action, converting the parts immediately surrounding the dead flesh into pus or matter, which separates the dead from the living flesh; the pus finds its way to the surface and is discharged. The parts having become freed from the dead flesh, the next step is to heal the cavity.—This is also accomplished by an inflammatory action; granulations are formed on the sides of the cavity, by which the parts are united.

In case of a bruise that does not kill any portion of the flesh, an inflammatory action is established, and the coagulable lymph supplied by the blood is diffused through the cellular tissue, rendering the parts more or less swollen and firmer than natural, but no pus will be formed; the swelling and hardness gradually subsiding until the parts are restored to a healthy condition.

When a person is stung by a bee, nature quickly brings on inflammation, in order to block up the cellular tissue around the

poisoned part, and thus prevent the poison from being absorbed, or extending further.

A broken bone cannot unite without inflammation. Cases have occurred where broken bones have not united by bony union, in consequence of the broken parts being frequently subjected to motion, breaking up the knitting of the bone, until finally the inflammation has subsided, and the parts not being supplied with sufficient blood to furnish material, and sustain the *action* necessary to unite the broken bone, a false joint is formed.

Dr. Physic devised a plan for effecting a re-union of the bone in such cases, by forcing a threaded needle through the limb, between the surfaces of broken bones, and leaving the thread in the part for the purpose of exciting inflammation, and thus furnishing the means necessary for a re-union of the bone.

Although inflammation be a restorative action, it is liable to become perverted into an unhealthy one, or at least the constitution may fail of accomplishing the design of inflammation. Thus if a person of scrofulous constitution, or whose system is in an otherwise unhealthy condition, should receive a bruise which destroys the vitality of a portion of flesh, the inflammation that ensues will be extremely liable to assume an unhealthy character, the efforts of nature being too feeble to establish healthy inflammation, and instead of being circumscribed as in case of a bile, it may spread over a considerable extent of surface, forming what is called *erysipelas;* and when matter is formed in the injured part, instead of being confined to the spot where it is secreted, as it is when the inflammation is of a healthy character, it spreads to a greater or less extent through the surrounding parts, which become swollen, doughy, and without extra heat attending, and may require a long time for the parts to become restored to a healthy condition in consequence of the want of power in the system to establish an efficient inflammatory action. A simple incision in the flesh from a sharp instrument, that heals rapidly in a healthy constitution, may become converted into an indolent ulcer in one of an unhealthy constitution. An injury upon the shin, that would be followed by healthy inflammation, and the part restored to a healthy condition in a short time in a young man would be apt to become converted into an indolent ulcer, and probably continue for years in an old man in feeble health. The *healing power* is sometimes almost destroyed in constitutions poisoned by the use of mercury: the simple scratch from a pin causing a long-continued running sore. Blisters have occasionally been observed to become gangrenous, in consequence of extreme prostration of the healing powers of the system; the constitutional energies becoming too far exhausted to establish healthy inflammation, and to sustain the action necessary to heal the parts. Inflammation may assume an unhealthy character in consequence of the severity of an injury—destroying

almost the vitality of the surrounding parts. This fact is frequently noticed in gun-shot wounds, the parts surrounding the wound being deadened, the vessels of the parts have not sufficient power to carry on a healthy inflammatory or restorative action.

"Let us suppose," (observes Astley Cooper,) "that two women each receive a blow on the breast, one with a vigorous and healthy constitution, and the other with a system worn down with care, anxiety and disappointment, and in a constant state of chronic feverish excitement, in which the secretions are imperfectly performed, and is thus predisposed to the formation of cancer: in the first individual the inflammation will be strictly healthy, going through its several stages until the cure is accomplished; but in the other, owing to constitutional peculiarity, the same extent of injury will produce cancerous disease; an affection over which all remedies hitherto tried have little control, and extirpation is but an uncertain mode of relief."

Inflammation in internal organs is no less curative in design, than when it is confined to external parts of the body. Poison taken into the stomach is followed by inflammation of its mucous membrane, unless the dose be so large as to destroy the vitality of this organ. The direct tendency of poison is to destroy the principle of life, and inflammation is the means which nature employs to counteract the effects of the poison and preserve the life of the parts. The inflammatory action existing in the mucous membrane of the stomach in those forms of disease called fevers, is the restorative power of nature in action. No person ever recovered from a low form of fever without some degree of inflammation having existed in the stomach. In inflammation of the stomach medicine should be given that will excite the secretions. Inflammation of the throat is relieved and its efforts aided by gargling with pepper tea, which excites the secretions and relieves the congested vessels. It is ascertained that the mucous membrane of the stomach seldom exhibits marks of inflammation when patients die soon after an attack of some highly malignant form of disease, for instance, yellow fever: the force of the cause of disease having suddenly prostrated the living principle so low that the constitution is unable to establish an inflammatory action. I have invariably employed cayenne pepper tea in every variety of fever, attended with symptoms of inflammation of the stomach, and have never observed the inflammation to be aggravated by it. Inflammation on the surface of the body may require cooling applications, to lessen the determination of blood to the parts; whereas inflammation in a secreting surface, like that of the mucous membrane of the stomach, require stimulants to restore the secretions.

Spontaneous Inflammation.—In the common form of bile, we observe an instance of spontaneous inflammation. The inflam-

mation is not less a curative action when it occurs spontaneously from constitutional causes, than when it occurs after local injuries. In small-pox, the inflammation attending the eruption is the curative action of the system. It has been observed universally, that where small-pox pustules are distinct and surrounded by a well developed inflammation, that there is but little ground for apprehension of danger; but when the eruptions are surrounded by an imperfectly developed inflammation, or the inflammation assumes an unhealthy character—being converted into erysipelas, there is great danger of an unfavourable termination of the disease, or at least that the efforts of nature will prove insufficient to eradicate the disease effectually from the system, thus leaving the patient affected with chronic symptoms.

Case.—A young man residing in Trenton, N. J., received a few weeks since a severe injury in the hand by the discharge of a gun. The wound was dressed with emollient applications, and it exhibited no marks of inflammation even after the lapse of several days from the time the injury was inflicted. At length the patient was seized with lock jaw and died in the course of two or three days after; the injured part not having been at any time sore or inflamed.

"Let us suppose that two women receive each a blow on the breast, one with a healthy and vigorous constitution, and the other with a system worn down with care, anxiety and disappointment, and in a constant state of chronic feverish excitement, in which the secretions are imperfectly performed, and is thus predisposed to the formation of cancer: in the first individual, the inflammation produced will be strictly healthy, going through its different stages, until the cure is accomplished; but in the other, owing to constitutional peculiarity, the same extent of injury will produce cancerous disease; an affection over which the remedies hitherto tried have little control, and extirpation is but an uncertain mode of relief."—*Cooper's Lectures.*

Inflammation sometimes occurs on the extremities of aged persons in consequence of debility. There being a tendency to stagnation of the blood in the parts in consequence of a want of power in the vessels; the constitution directs an unusual supply of blood there in order to give increased power to the vessels, and this effort is frequently attended by inflammation of the skin.

Finally, whenever nature is called upon to repair an injury, such as a bruise, cut, or wound of any description, or to overcome debility in a part, however produced, she performs the cure by means of *inflammation.* It must be borne in mind, however, that the efforts of nature often require the aid of medicine and other means for the regulation and sustaining of her restorative actions. Thus in a common bile there may be an undue accumulation of blood in the parts, causing so much swelling and pain as to prove detri-

mental to the sanative inflammatory efforts.—Here means should be employed for lessening the determination of blood to the part, facilitate its return to the heart, and to reduce the external heat of the inflamed part when it is too high.

Chronic Inflammation.—When inflammation fails of accomplishing its object, and instead of coming to a crisis, becomes seated, it is termed chronic inflammation. Suppose that an individual is attacked with erysipelas, and the inflammation instead of forming a crisis and disappearing in the course of a few days as it usually does, should become seated in the part, the efforts of nature being too feeble to restore the parts to a healthy condition; such would be termed chronic inflammation. Acute inflammation is often converted into chronic inflammation by improper treatment, weakening the power of action and thus frustrating the designs of nature. I once saw a labouring man who lost the use of one of his hands in consequence, I believe, of the continued application of cold lead water to erysipelas. The inflammation covered the back of the hand and extended up nearly to the elbow. Lead water was applied by the direction of a physician, and the application of it continued three weeks. The parts became so much weakened that the vessels apparently lost the power of action, the muscles became stiff and rigid so that the hand became useless. It is not unlikely that this patient under a different course of treatment would have retained the use of his hand.

TREATMENT OF INFLAMMATION IN GENERAL.

Constitutional Treatment.—When the general health is much disordered, inflammation is liable to assume an unhealthy character. Hence constitutional treatment is in many cases of the greatest importance as a means of curing inflammation. Thus if a patient in bad health receive a severe injury he should be carried through a course of medicine, repeating it if necessary; together with the continued use of pure stimulants to sustain the secretions, and aid in equalizing the circulation, and promoting perspiration. Severe injuries always occasion more or less derangement in the system, weakening the restorative power of the constitution, and increasing the liability to the occurrence of unhealthy inflammation: erysipelas for instance.

If an individual receive a severe injury, as a blow upon the head or fall from a height, soon after eating a full meal, his digestion will be suspended, and the imperfectly digested food will still further oppress the functions of the stomach and aggravate the symptoms. Under such circumstances an emetic should always

be given, no matter in what part the injury may be situated. There is no better form of emetic than the following.

A teaspoonful of the third preparation of lobelia, and one of green lobelia powdered, adding a teacup two-thirds full of strong bayberry tea, sweeten and give at once, repeating the dose as often as necessary; if the injury be on the head, the emetic may be preceded by the warm foot bath or vapour bath, and an enema administered, with a view to determine the circulation to the bowels, and thus lessen the tendency to a great determination of blood to the head. Although an injured part requires a supply of blood greater than is necessary when that part is in a healthy condition, still there may be too great a determination of blood to the injury, or there may be too great a collection of blood in the part in consequence of the weakened state of the vessels, they being unable to return the blood by the veins into the general circulation.

The constitutional disturbance after severe injuries is sometimes very great, requiring strict attention. The treatment for constitutional shocks or disturbances will be pointed out hereafter.

During the first stages of inflammation, if there be general fever, or a dry and hot skin and foul tongue, or if the inflamed parts are very painful, or the patient restless and distressed, then, besides a course of medicine, the system should be relaxed by giving broken doses of lobelia, and occasionally a dose of composition or pepper tea, or of simple herb teas, pennyroyal or ditany.

The physician who asserts that such a course of treatment as I have just described will aggravate inflammation, or have any other tendency than that of hastening its progress to a favourable termination, has imbibed *false principles* in medicine, instead of the *truths* of the science.

The above course of treatment is not to be restricted to the first stages of inflammation; it is during this period that it is in general most required. It will be proper, however, during any stage of inflammation when the symptoms appear to demand it.

"When you are required to take charge of patients suffering from an injury which demands a length of time for its restoration, you must be exceedingly careful how you take away blood from the system generally, but must in preference adopt local bleeding; for if, as I have observed, you adopt a system of free depletion, nature will not be equal to the restoration of the injured parts, and the most disastrous consequences will follow the indiscriminate employment of blood-letting. There is not a greater error than this in the practice of surgery." *Cooper's Lectures.*

The following case is related by Sir Astley Cooper, as an instance of the fatal consequence of over-bleeding. "A stout man was admitted into Guy's hospital, having a simple fracture of the tibia, with considerable contusion of the surrounding parts; a day or

two after his admission, he had severe constitutional irritation and acute pain, with spasmodic action of the muscles near the seat of injury. To relieve these symptoms, the dresser was directed to take some blood from the arm of the patient, which he did; but thinking it proper that faintness should be produced, as a proof of its effects upon the constitution, and forgetting that the patient was in a recumbent position, he abstracted so large a quantity of blood, that all power of restoration was completely annihilated, and the man died."

The above case is but one of thousands, and probably tens of thousands, where life has been cut short in this way.

When an individual is badly hurt, it is the almost universal practice among physicians to bleed, under the impression that it will lessen the tendency to inflammation. So far as it relaxes the system and occasions perspiration, it may lessen the pain, and for the time prevent over excitement of the part, but there is as much probability of such a course of practice perverting the salutary efforts of nature, the inflammation consequently assuming an unhealthy character, as that it will lessen the tendency to violent inflammation. Bleeding and purging impair the nutritive and assimilative functions, and in proportion as these important functions are weakened or impaired, so in proportion will inflammatory action be more liable to become perverted. The administration of a vapour bath will be attended with all the good effects that can result from bleeding, and without the liability to any of the danger consequent upon the loss of blood.

Vapour Bath.—To restore the secretions of the skin is an important indication in the treatment of inflammation, whether it be seated in external or in internal parts. The administration of the vapour bath, together with the use of pure stimulants, as capsicum or composition tea, and broken doses of lobelia, will restore perspiration and likewise excite the secretions of the mucous membrane of the stomach, which is equally important in the treatment of inflammation. These are remedies which harmonize with the living principle, and at the same time that they relieve the suffering of the patient, they aid the efforts of the constitution in repairing injuries.

In the latter stages of inflammation, for instance, where there is a free discharge of pus from a part, and the patient is clear of fever, bitter tonics may be given.

When the tongue is furred and manifests a tendency to clean around the edges, or the coating on the tongue softens, then the astringent, or anti-canker medicine should be employed occasionally, with the view of clearing the mucous surface of these morbid secretions, or canker.

Diet.—In the early stages of inflammation, and more especially if the tongue be coated, or the general health deranged, the diet must be confined to such articles as require but little effort to digest them, such as light gruels, toast and tea, barley water, rice, milk porridge, &c. It is better that the patient have a scanty supply of food than to take such as the stomach cannot digest, for this will always operate against nature. It is not so much low living that is demanded, as it is the want of power to digest strong food that must be regarded.

When the patient is in a relaxed condition with absence of fever, cleaning of the tongue, and a tendency to warm perspiration, the diet may be nourishing—eggs, custards, oysters, beef steak, mutton, wild game, bread and butter, and whatever the patient may fancy that does not disagree with the stomach, avoiding of course articles that are known to be hard of digestion, such as hot cakes buttered, sausages, sweet cakes, fresh pork, and corned beef.

Of External applications in Inflammation.—In acute inflammation, attended with great heat and swelling in the parts, the application of cotton or soft cloths kept constantly damp with whiskey and water, or vinegar and water, will afford relief. Although inflammation be a restorative action, still it often needs the aid both of internal and external remedies, to assist the constitution and the vessels of injured parts in regulating the inflammatory action. A wounded part requires a greater supply of blood to repair the injury, than is sent to this part when in a healthy condition; yet without proper treatment there may be an undue accumulation of blood in the part, occasioning unnecessary pain and acting injuriously both upon the injured part and upon the general health.

Poultices are useful in recent cases of inflammation, as in biles, felons, severe bruises, and also in injuries where the flesh is much torn or lacerated. In pleurisy, though the inflammation is seated in inward parts, still experience proves the utility of poulticing the affected side, provided the poultice be kept warm. Slippery elm, white pond lily, powdered cracker and ginger, form a poultice adapted to all cases where there is inflammation.

In erysipelas, and in all cases where an inflammation has been long-continued, cold applications and emollient poultices are improper. Local steaming and stimulating applications are here required, to increase the power of the enfeebled vessels. It is in active inflammation, such as attends common biles and wounds in healthy constitutions, that the use of external cooling remedies are appropriate.

Warmth and Moisture.—Warm fomentations, and the application of steam or warm vapour, may be employed with safety in all cases of inflammation; and generally these applications afford relief even in acute inflammation, by exciting perspiration. In chronic inflammation, for instance, as it occurs on the legs of aged persons, stimulating applications should be applied either in the form of liniment or poultice.

Case.—During the summer of '39 I was called to visit an old lady residing in Water street, who had chronic inflammation on both limbs, extending from the ankle joint to the knee, the parts being much swollen. The case was one of long standing, but was cured by steaming the limbs every two or three days, and covering the diseased parts with a poultice composed of the dregs of No. 6, slippery elm bark and white pond lily. The poultice was spread on silk oil cloth in order to prevent evaporation, and to retain the heat. The patient also took composition powder in luke warm water three or four times a day; and the feet were elevated upon a chair, when the patient was out of bed.

Position.—When inflammation is seated about the head, it should be elevated above the level of the body; or, if it be seated on a limb, it also should be raised higher than the body. This lessens the determination of blood to the inflamed part, and by the aid of gravity favours the return of the blood from the parts inflamed.

Case.—"I was sent for," observes Astley Cooper, "to see a gentleman farmer, in the neighbourhood of Raleigh, in Essex, who for a long time had been subject to a very severe inflammation in both his legs; they were of a very dark red colour, much swollen, and gangrene was threatened in them; the constitutional irritation was great, and his tongue covered with a brown fur: when I saw him his legs were resting in a tub of cold water, and on his taking them out they smoked. I had him immediately placed on a sofa, and contrived to rest his legs upon one of its ends, so as to raise them much higher than his body; the vessels soon began to unload themselves, and in a short time the redness of the skin was much lessened; I then applied flannels, which had been dipped in tepid water, and afterwards in warm water; this produced a free perspiration, by which the skin became unloaded; the swelling and pain consequently diminished. He gradually recovered, and in six weeks was able to ride a considerable distance. It would be absurd to attempt to cure extensive inflammation in a limb, if it were allowed to remain in a depending posture."

In inflammation about the hand, for instance a felon or bile, is rendered extremely painful by the hand being allowed to hang down.

Rest.—During the active stage of inflammation the parts should be kept at rest: this is more particularly necessary in inflammation of the joints.

Pressure.—In chronic inflammation of an indolent character, more especially when accompanying abscesses, carbuncle for instance, benefit will be derived from pressure: by bandaging the parts or applying strips of adhesive plaster. Erysipelas sometimes leaves the parts thickened and hard after the inflammation has subsided; here pressure will be required, to excite action in the absorbent vessels for the purpose of removing the swelling.

Friction.—In chronic inflammation of the joints, rubbing the parts briskly excites the circulation, and is frequently followed by very marked benefit.

In disease of the general system, *fever* is nature's *hand-maid;* in local diseases her chief dependence is upon *inflammation.* Hence in no case of fever or inflammation should we aim to *subdue* or *break down* fever or inflammation, but to *assist* the efforts of nature, by means which harmonize with her established laws.

SECTION II.

SPRAINS.

Sprains are caused by a sudden wrench or twisting of a joint, by which the ligaments or tendons are either torn or violently stretched.

The wrist and ankle joint are those most liable to sprains.

Sprains are attended with severe pain at the time of the injury, which sometimes continues for hours. Soon after the accident the parts begin to swell in consequence of the blood stagnating in the injured part, or from an effusion of blood into the cellular tissue from the little blood vessels being ruptured.

Immediately after a sprain the joint can be readily moved; whereas in a dislocation, the joint is stiff and rigid in consequence of the contraction of the muscles.

When inflammation comes on to repair the injury from the sprain, the parts become more swollen and extremely tender, so that the slightest motion in the joint will cause pain.

Treatment.—In sprains the first thing to be attended to, is to prevent blood from being effused into the parts from the ruptured

vessels. This may in a great measure be prevented by pouring a stream of cold water upon the part soon after the accident, and keeping the part in an elevated position. The stream of cold water drives the blood from the parts and contracts the vessels. It may be continued fifteen or twenty minutes at a time and repeated two or three times in the course of the first three or four hours after the injury. By this time the torn vessels will have become closed and the parts then require to be kept warm and bathed frequently with salt and vinegar, No. 6, or stimulating liniment.

When inflammation occurs, evaporating lotions, as alcohol, or whiskey, diluted with water, and warm fomentations, as wormwood stewed in vinegar must be used. Steaming the part occasionally will prove especially beneficial. If it be the wrist joint that is sprained, the arm must be carried in a sling; or if it be the ankle joint it should be placed on a chair whilst the patient is sitting up, and avoid producing motion in the injured joint.

Application of Splints.—To secure the joint from motion in cases of severe sprains, splints should be applied. This is more particularly necessary in injuries of the wrist joint. If motion in the joint be not prevented whilst the broken tendons or ligaments are uniting, by means of inflammation, it may break up the new adhesions, and thus greatly retard the cure. It is not until after the inflammation has entirely disappeared that motion in the parts should be allowed.

After the inflammation and extreme soreness have subsided, the part remaining swollen, the action of the absorbent vessels must be promoted by rubbing the parts occasionally with the warm hand, or dry flannel, and then applying stimulating liniments or embrocations, and bandage the joint as tightly as can be borne comfortably, always commencing the bandage at the end of the limb. Steaming will also promote the action of the absorbents.

A joint that has been once badly sprained, will in general remain weak a considerable length of time, and be more easily sprained than before. When there is violent pain in the parts, as generally happens immediately after the injury, the patient will experience relief by taking a dose of the third preparation of lobelia, or a dose of lobelia powder, in composition or pepper tea.

SECTION III.

BRUISES.

A slight bruise requires in general but little attention, the injury being soon repaired.

A very painful abscess sometimes forms in the heel, in consequence of a bruise. This kind of abscess is commonly called a stone bruise. The proper treatment for a stone bruise, when first felt, is the application of steam to the part to promote perspiration, and keeping the foot on a chair when sitting up. If these do not restore the circulation of the part and remove the soreness, after being repeated two or three times, a warm poultice must be applied to keep the parts relaxed and in a perspiration, until the abscess points, or there be other evidence of the existence of matter in it; the part may be opened, and the poultices continued until the abscess ceases to discharge pus freely; after which some kind of salve or plaster must be applied to exclude the air from the cavity.

SECTION IV.

SEVERE BLOWS OR FALLS, BY WHICH THE SYSTEM RECEIVES A VIOLENT SHOCK.

In all cases of severe bruises the vital powers of the system will be more or less prostrated by the fall or blow which occasions the bruise. A man receives an injury, for instance, a severe blow upon the head, falls from a height, or is thrown from a horse with such violence as to cause concussion of the brain—he will lay senseless and pale; the pulse weak; the breathing feeble, and in some instances scarcely perceptible. The patient may recover his sensibility in the course of a few minutes. If, however, reaction should not take place, and consciousness in a measure be not restored, in a few minutes after a severe injury, means should be taken to bring on reaction. These are, rubbing the surface with the warm hand or warm flannel, keeping the head on a level with

the body, administering stimulants by the mouth and also by injection, and the application of external warmth, either in the form of steam or by the application of warm bricks; and bathing the surface and extremities with stimulants.

Injections.—Stimulating injections constitute the most efficient means of restoring animation in persons that are seriously stunned by an injury. Two or three teaspoonsful of the third preparation of lobelia should be administered in half a pint of lukewarm water; if this medicine be not at hand, almost any stimulant may be employed, such as capsicum or composition tea, No. 6, or even vinegar and water, or brandy and water.

Emetics.—The operation of emetics is decidedly beneficial in cases of great prostration after severe injuries. If the system sustain a severe shock, within an hour or two after the individual has taken a hearty meal, free vomiting will be highly necessary. A severe shock to the system, suspends at once the power of digestion, and if there be undigested food in the stomach, it will oppress the powers of life, and may prevent or greatly retard the occurrence of reaction. No danger is to be apprehended from exciting vomiting under such circumstances, namely: where a person is severely injured within an hour or two after taking a meal. The best form of an emetic is the third preparation of lobelia, given in bayberry tea; or the lobelia powder may be given, adding a portion of No. 6, or capsicum. When a person is severely stunned soon after a full meal, rendering it necessary to produce free vomiting, the usual emetic, (lobelia) not being at hand, a tablespoonful of ground mustard given in warm water, or the patient made to swallow warm salt water freely, may answer as an emetic. Forcing the feathered end of a quill, far down the throat, is sometimes resorted to, in order to produce vomiting.

Animation being restored the use of pure stimulants must be continued, in small doses, aided by the application of external warmth, with a view to sustain the system, and excite moderate perspiration.

Steaming is of great service to patients who have been badly bruised. It is always safe to apply the vapour bath, the patient being placed on a couch or mattress, when he is too feeble to sit up. When there is fever, and the patient restless it will not do to apply dry heat externally, and even when a moist heat is applied during fever it may be necessary to bathe the face and surface of the body with cold whiskey and water, or vinegar and water.

External Applications to Injuries.—In the case of a bruise, the flesh not being torn or cut, warm fomentations are to be applied—

a poultice of wormwood stewed in vinegar and thickened with rye meal, flannel wet with No. 6, or with salt and vinegar, or bathing with stimulants and applying silk oil cloth over the parts to favour perspiration.

When the flesh is both torn and bruised, a poultice must be applied, and renewed daily until the parts suppurate and cease to discharge matter freely, when a simple dressing of salve will answer a better purpose than a poultice. Whatever emollient substance the poultice be made of, a portion of ginger must be added to render it moderately stimulating.

Bruises on the head, may be treated by the application of No. 6, or salt and vinegar. If the scalp should be cut, the edges of the wound must be properly adjusted, the hair cut away, and strips of adhesive plaster applied across the wound leaving space for the escape of the blood and serum that oozes from wounds in general; soft lint must be laid over the wound, and a bandage or cap applied. If the patient complain of great heat in the part, the head may be wet occasionally with whiskey, vinegar, or with No. 6. The application of No. 6 to a wound, is useful, as it stimulates the vessels and aids them to carry on healthy inflammation, by which the wound is healed, or the injury repaired.—A severe injury never was healed nor injured parts restored to a healthy condition without the aid of inflammation. Therefore in severe injuries the indications are not to *subdue* inflammation, but to *aid* and *regulate* the healing efforts of nature, by sustaining an equilibrium in the circulation, promoting the secretions both of the skin and internal organs, regulating the temperature of the inflamed part, and supplying the stomach with food suited to its condition. If two individuals, one in vigorous health and the other feeble and with but little constitutional vigour, should both receive a severe wound of equal extent; in the healthy person the inflammation in the part will be of a healthy character and run its course quickly; whereas in the other the efforts of nature being feeble and the blood not so richly supplied with nourishment, the inflammation will be more liable to assume an unhealthy character or the wound be tedious in healing. And again when a patient is in bad health, the system does not possess the same power to maintain an equal circulation of blood throughout the system as when in health, and therefore congestion or an undue accumulation of blood in injured parts will be more likely to occur.

When there is an undue determination of blood to an injured part, occasioning much swelling and hardness, attended with a sense of great heat and pain, the parts should be kept wet with evaporating lotions, as camphor and water, alcohol and water, or vinegar and water; the patient should be taken through a course of medicine, if the severity of the symptoms demand it, together with the continued use of stimulants and broken doses of lobelia, with a view to promote perspiration, and excite the secretions of

the stomach and bowels aided by the application of external warmth.

Severe injuries are in general followed by more or less fever, in the course of a few days after the injury: the tongue will become dry and furred, the skin hot and dry, and the pulse increase in hardness and quickness. In this condition of the system stimulants—capsicum, ginger, composition or simple herb tea must be given, together with small doses of lobelia, bathing the surface when needed, with alcohol and water, or vinegar and water, and occasionally the administration of a vapour bath, followed by an emetic, if the system be much disordered, or the injury assume an unfavourable appearance.

Case.—A young man engaged in a manufactory, had his arm caught between two large cog-wheels, which tore the flesh from one half of the arm, from a few inches above the elbow up to the shoulder, and split off a portion of the arm bone which caught in between the cogs, and stopped the machinery. The shoulder and part of the back were bruised into a jelly. The physicians of the village were called, who decided that the arm must be taken off at the shoulder, and appointed the hour for performing the operation. The patient, however, requested that his step-father, a Thomsonian physician, who resided some miles distant, should be sent for. On his arrival he applied a poultice over the whole of the injured parts, carried him through a course of medicine; occasionally repeated it, and gave freely of stimulants to promote the curative action of the system, and in six weeks the wounds were perfectly healed. If the great vessels and veins of the arm had been broken off, no treatment could have saved the patient's arm; but when these are not destroyed, however severe the injury may be, there is a probability of saving the limb.

Case.—Mr. R—— was thrown violently upon the pavement by the overturning of a sulkey, which left him for some time senseless and bruised him internally, so that breathing was painful, and he raised small quantities of blood. After his sensibility was restored and he conveyed home, two physicians that had seen him shortly after the injury, called to ascertain how he was, and on being apprised of the fact that Mr. R. was a Thomsonian, they requested to know what medicine he was taking; and when some composition tea was handed them and they were informed that this was the medicine the patient was taking, they manifested great surprise and gave it as their judgment that such medicine would throw the patient into a fever and endanger his life. Mr. R., however, took freely of hot medicine, was steamed every day, was taken through one course of medicine, and recovered rapidly without the occurrence of a bad symptom. Physicians employ bleeding and purging

to prevent inflammation, and although they may relieve pain at the time, yet it enfeebles the curative efforts of nature, increasing the liability to unhealthy inflammation, and doubtless in many instances destroys the life of the patient. The practice of bleeding in injuries is so generally adopted by physicians of the old school, that it is thought by the community to be necessary, and when a person receives a severe injury, every one is recommending bleeding as the first and most important remedy, so that sometimes it requires no small amount of courage to withstand this popular *mania* for bleeding.

SECTION V.

WOUNDS OF THE SCALP.

Wounds of the scalp, more especially when the parts are bruised and lacerated, require strict attention, such wounds being often observed to be followed by serious consequences. A simple cut through the scalp with a sharp instrument, heals in general, without difficulty, except in persons of depraved habits, or in bad health from other causes. Wounds of the scalp are particularly liable to produce erysipelas, which sometimes affects the brain so as to endanger life.

Treatment.—In severe injuries of the head, the edges of the wound must be properly adjusted, the hair shaved off closely around the edges of the wound, the parts washed with whiskey and water, or with warm water, lint laid on the wound, and a bandage applied. In bandaging the head, especial care must be observed to have the hair combed smooth into its natural position, for if a lock of hair be turned the wrong way and bound down, it will occasion soreness of the scalp. Wounds of the scalp must never be stitched.

The Dressing not to be Removed too soon.—In wounds not only of the scalp, but of every other part, the dressing should not be removed so as to expose the wound to the air until the fourth, or fifth, or even the eighth or ninth day after the occurrence of the injury. If the injured part become painful and very hot, the head must be dampened with whiskey or vinegar, and be kept elevated. Wetting the parts around the injury with No. 6, occasion-

ally, and even permitting it to come to the wound, will lessen the tendency to erysipelas, or unhealthy inflammation. Adhesive inflammation is necessary—injuries cannot be repaired without it, and I know of no local application superior to the No. 6, or the simple tincture of myrrh, to stimulate the vessels and assist them to establish adhesive inflammation.

Constitutional treatment should always be employed in wounds of the scalp. Soon after the wound is inflicted, the patient should be carried through a course of medicine, more especially if the wound be severe, and repeated as often as the condition of the system may require it. If the bowels be costive, they must be evacuated by the use of the syringe.

Perspiration.—It is important to promote the secretions and exhalations of the skin by the use of stimulants that neither disorder the brain, nor aggravate inflammation. Capsicum, composition, or ginger tea, may be used freely and with safety. Simple herb teas may be employed for the same purpose. The feet must be kept warm. When a patient is feverish, a small portion of lobelia should be added to the stimulants given, and the surface bathed occasionally with some alcoholic preparation.

Should symptoms occur denoting inflammation of the brain—pain in the head, flushed countenance, intolerance of light and sound, and delirium, the system must be placed under the influence of lobelia taken in the usual way, and also administered by injection. A teaspoonful of brown or green lobelia may be administered by injection at a time, prepared in lukewarm water, and retained; and occasionally a *stimulating* one also may be administered—or a teaspoonful of the third preparation of lobelia in bayberry tea. I have frequently given the third preparation of lobelia to patients labouring under symptoms of inflammation of the brain in low forms of fever, and have invariably observed good effects to result from it; in many instances after vomiting, the delerium has very materially moderated, and in some instances disappeared for a time.

In inflammation of the brain from injury of the scalp, it will be proper to relax the system by the lobelia enemas, and the application of vapour to the body before giving an emetic of the third preparation of lobelia. This treatment must be perseveringly employed, for inflammation of the brain often proves fatal under any mode of treatment. The hair must be cut short, and the head raised upon pillows, and cloths applied wet with alcohol, or vinegar, or if there be erysipelatous inflammation of the scalp, No. 6, or the third preparation of lobelia, must be used on the inflamed part, whilst on other parts of the head the first mentioned articles may be used.

When there is evidence of matter under the scalp, an opening should be made with a lancet, to allow the pus to escape; after which especial care must be observed to shield the parts from the air by a stimulating poultice, or plaster, spread upon oiled silk, and if a poultice be employed, it must be kept moist with warm water containing about one-fourth of its quantity of No. 6. Equal quantities of composition powder and slippery elm, mixed with lard, form a suitable poultice in erysipelas, attended with the formation of matter in the parts.

The practice advocated by some physicians and denounced by others, of prescribing bark and wine to patients labouring under erysipelas of the scalp, when the secretions are in a great measure suspended, is not much less objectionable than the absurd practice of bleeding patients "*almost to death*," in inflammation of the brain. In the earlier stages of erysipelas, the medicine employed should be such as excite the secretions both of the skin and of the mucous membrane of the stomach and bowels. Hence when the tongue is dry, as a general plan of treatment, use pepper tea, either alone or combined with simple herb tea, such as pennyroyal, balm, &c., and broken doses of lobelia, and apply a moist heat to the surface of the body and feet. A case of erysipelas that would be aggravated by the use of bark and wine, would be relieved and benefited by the treatment as above described. In any case of fever in which the secretions are suspended, bark and wine would prove more or less deleterious, whereas the treatment above mentioned would relieve the symptoms and assist nature.

Inflammation of the brain is always attended with danger, and therefore in injuries of the scalp, or concussion of the brain, treatment should be early applied to cleanse the stomach, promote the secretions, and sustain the equilibrium of the circulation, as the surest means of preventing inflammation of the brain. Even slight injuries of the scalp should not be neglected, as very small wounds of the head have frequently been observed to occasion dangerous symptoms through neglect or exposure. Wherever the scalp is the least torn or cut, it must be protected from the air, otherwise erysipelatous inflammation may be the consequence.

Case.—Wm. B. Smith received a severe blow upon the side of the head from some machinery in an iron foundry, which left him senseless a considerable length of time; the scalp was cut to the bone, the wound being about two inches in length and lacerated at the edges. This wound was dressed with strips of adhesive plaster (the hair having been previously shaven from the edges of the sore) dry lint applied and the head carefully bandaged. This patient was placed under a course of Thomsonian treatment, the vapour bath administered every day, and means used for promoting perspiration, and also other secretions, such as composi-

tion, or pepper tea, and warm bricks to the feet; and the bowels regulated by the use of enemas. On removing the dressing from the head, on the seventh or eighth day, I found the wound healed, by "*first intention*," as it is termed, a circumstance rarely occurring in wounds of this kind. A physician residing near the place where this accident happened, was sent for immediately after the accident, who observed to some of the patient's friends, that if he (the patient) was not bled, his life would be endangered. The patient, however, was neither bled, nor purged; and although the shock was very severe, he recovered without the occurrence of an unfavourable symptom.

Diet.—In all cases of severe injuries the diet should be light. Gum Arabic mucilage, elm gruel, milk porridge, toast and tea, custard, and oat meal and Indian gruel form suitable articles of diet when the digestive powers are in a prostrated condition. In a later period when the injured parts are secreting matter freely, or the patient is free from any considerable degree of fever, the tongue moist and the patient is disposed to perspiration, then a more nourishing diet will be required, as chicken soup, beaf steak, mutton, eggs, stale wheat bread, &c.

Tonics.—When an injured part or an abscess discharges matter freely and the system is in a relaxed condition, bitters must be taken to strengthen digestion.

SECTION VI.

WOUNDS PRODUCED BY SHARP INSTRUMENTS.

Simple cuts made by sharp instruments heal more readily than any other kind of wound of the same extent.

In treating a simple wound, the first thing to be attended to is to arrest the bleeding. If an *artery* be cut, the blood will be of a bright red colour, and come in jets; dark blood comes from veins.

When a blood vessel is cut or torn, a gluey substance is secreted by the coats of the injured vessel which gradually plugs it up and entirely stops the escape of blood. Arteries the size of a crow-quill though they may bleed rapidly at first, will soon become plugged up by this admirable process of nature.

An intelligent person once related to me the following circumstance to prove that some persons possessed the power of stopping the flow of blood without seeing the patient. A young man who

was cut badly continued to bleed profusely, until the family became alarmed, and sent a messenger off post haste to a dutchman, who lived twenty miles distant, who it was thought possessed the power to stop bleeding. On the messenger arriving at the residence of the dutch doctor, and made known his mission, he was asked the name and age of the patient, on being informed in these particulars, he told the messenger to go home now, that the bleeding would be stopped before he got back; and sure enough the bleeding had ceased, because nature had been all this time filling up the vessels until they had finally become closed. The dutchman, however, received the credit of stopping the blood and of saving the young man's life.

Pressure.—Unless when a large artery be cut, the bleeding may be arrested in a short time by pressing upon the parts with a sponge or a compress of folded linen or muslin.

Position.—Bleeding from a cut upon the extremity of a limb may be partly arrested by holding the limb above the level of the body; aided by pressure upon the part.

Dr. Bellvil, who was a very eccentric, but most distinguished physician, of Trenton, N. J., was sent for in great haste to assist another doctor to take up an artery that was bleeding. The messenger informed the Dr. that the cut was in the ball of the thumb and that the doctor who was there had been searching two hours for the artery without being able to find it. The doctor was surprised that a physician should be probing the parts and keep the blood running by searching for an artery in a part where the vessel would soon stop bleeding if bound up and left alone, refused to attend the summons, and told the messenger to go home and bind up the wound, and cut the d——d doctor's head off.

Cleansing the Parts.—After the bleeding is stopped, or so nearly so as to admit of the wound being dressed, the parts should be cleared of all extraneous substances and the clotted blood removed from the surface and edges of the wound.

Placing the injured parts in their proper position is the next step and this is one of some importance. In a simple straight incision there is seldom any difficulty in keeping the sides of the wound in a proper position, unless when the wound is extensive and cut across a muscle,—for when a muscle is cut across, the contraction of the muscular fibres will separate the sides of the wound and break up the new adhesions as they are formed by the healing process.

When a portion of flesh is badly cut, stitches may be required;

the stitches should be made with a fine sewing needle, threaded with cotton or silk, and should not penetrate beneath the skin.

Adhesive Plaster.—Never cover the whole of a wound with adhesive plaster, but put it on in strips leaving sufficient interspaces to allow the escape of blood and serum from the wound. Lint is to be applied over the strips and the part properly bound up.

Bandaging the Limb.—In cases where muscles are cut across, for instance, a deep cut across the calf of the leg, or across the thigh, or the fleshy part of the arm, the limb should be bandaged from its extremity up to the next joint above the injury. Thus if on the calf of the leg the limb should be properly bandaged up to the knee and kept in a flexed position, and all motion of the limb avoided until complete union has taken place.

Evaporating Lotions.—When a wound becomes hot and painful, evaporating lotions, alcohol, or camphor and water must be applied, or the parts kept wet with cold water; still the dressing must not be removed, except so far as to loosen it, if it becomes too tight. A bandage should always be wet before it is applied, otherwise it will shrink and become too tight; in which case it becomes necessary to wet it after it is applied.

In large wounds stitches are generally preferable to adhesive plaster alone, for the parts require the application of evaporating lotions, which will render adhesive plaster of but little use. Where, however, the sides of the wound can be kept in perfect apposition by bandaging, both the adhesive plaster and stitches may be dispensed with.

Removing the dressing too soon may very materially retard the cure; this should therefore be avoided until several days or even a week has elapsed after the occurrence of the injury, unless it becomes painful or offensive from the putrefaction of the blood and secretions confined under the dressing.

Constitutional Treatment.—A simple cut seldom requires constitutional treatment; still slight wounds are sometimes observed to become converted into very troublesome sores through neglect, and exposure to cold and dampness. In large cuts constitutional treatment will be necessary when the patient is in bad health, or the wound becomes very painful or assumes an unhealthy appearance. The constitutional treatment indicated will not differ from that already recommended in injuries of the scalp. A single course of medicine will sometimes cause a wound that presents an unhealthy appearance to become greatly improved in its general aspect in the course of a few hours.

SECTION VII.

LACERATED WOUNDS.

Lacerated wounds are made by rough instruments which tear the fibres of the flesh.

Lacerated wounds rarely bleed to any considerable extent; even large arteries may be torn asunder without occasioning much loss of blood.

Lacerated wounds are more difficult to heal than a smooth cut, they seldom unite without the formation of pus. They are also much more liable to be attended with unhealthy inflammation, and constitutional disorder, than wounds made by a sharp and smooth-edged instrument.

The Treatment, both local and constitutional, is the same as described for wounds produced by sharp instruments, except that lacerated wounds demand more attention both in relation to evaporating lotions to the parts, and constitutional treatment.

SECTION VIII.

BRUISED WOUNDS.

These are wounds in which portions of flesh are torn, mashed or bruised so as to destroy the vitality of the injured parts.

Treatment.—Warm fomentations and moderately stimulating poultices are required in order to favour suppuration—the method employed by nature to remove the disorganized flesh. When the dead parts have sloughed away, the poulticing is to be abandoned; the sides of the wound drawn together, by strips of adhesive plaster, and the air excluded from the wound by salve spread upon soft linen or muslin and applied over the parts, and then properly bandaged. If the parts continue to form matter freely, lint should

be applied to absorb the pus. The dregs of No. 6, mixed with about an equal quantity of elm, form a good poultice.

The constitutional Treatment should be regulated to suit the exigencies of the case. Promote the secretions by the use of pure stimulants; if the system be much disordered administer a course of medicine; and during the process of suppuration give tonics.

The Diet should be nourishing provided the patient be clear of fever and the tongue clean, or cleaning.

SECTION IX.

PUNCTURED WOUNDS.

Wounds made by pointed instruments, dirks, hooks, scissors, nails, &c., are much more liable to be followed by serious consequences, than cuts made by sharp-edged instruments.

Punctured wounds in tendonous parts, as the palm of the hand and ball of the foot are far more dangerous than when they happen in fleshy parts devoid of tendons.

Punctured wounds in the palm of the hand or in the bottom of the foot are apt to close up without the occurrence of adhesive inflammation or the discharge of matter. Such wounds are followed frequently by much constitutional disorder, and sometimes by locked jaw. When matter is formed at the bottom of a punctured wound in the palm of the hand, sole of the foot, or in other tendonous parts, as about large joints, it may be confined and be prevented from passing off by the firm and dense tissues about these parts, and require an opening to be made by a lancet to allow the matter to escape.

Treatment.—In punctered wounds means should be employed to excite adhesive inflammation, by pouring in the wound No. 6, or spirits of turpentine, and then apply a stimulating poultice to the part. The poultice should contain a considerable portion of cayenne pepper, so as to attract blood to the part and establish adhesive inflammation and suppuration. It is the deficiency of blood in tendonous parts, as in the palm of the hand and sole of the foot,

that occasions punctured wounds in these parts to close without the occurrence of inflammation, or the formation of pus.

If the hand or foot be pierced by a rusty nail, the wound should be cleaned out by a probe, or syringe with soap suds, or simple warm water, and then pour into the wound No. 6, or spirits of turpentine, and apply the stimulating poultice.

If the stimulating poultice, after continuing on several hours, should become extremely painful, causing an unnecessary afflux of blood to the parts, it may be removed and one less stimulating applied, which must be kept warm, and the limb elevated by a sling, if on the hand; or if the wound be on the foot, it should be raised on a chair when the patient is sitting up.

Constitutional Treatment is highly necessary in cases of severe punctured wounds, more especially if the wound be about a large joint, or in the palm of the hand, or ball of the foot. A course of medicine should be first given, after which the patient should take sufficient of composition, pepper tea, spice bitters, or other stimulants to promote a healthy action throughout the system. In proportion as the vital power is strong, in the same proportion will the constitution be able to resist the influence of disease. A man whose stomach is in a healthy condition, and whose digestion is good, will be much less liable to have the system seriously disordered by a local injury, than one whose stomach is foul, and his digestion imperfect.

Exposure to cold and dampness and excesses of every kind should be avoided by those who have received a punctured wound.

SECTION X.

WOUNDS OF JOINTS.

A wound of a large joint, for instance, of the knee where the cavity of the joint is cut into so as to allow of the admission of air, and the escape of the joint-water, is an accident of the most serious character. When such a wound occurs in an aged person, or in one of an unhealthy constitution, the patient very rarely recovers the use of the joint and it not unfrequently terminates fatally. Young per-

sons of vigorous constitution, may in general recover from such injuries, still there is great danger attending wounds of the large joints.

Treatment.—In wounds of a joint the first and by far the most important point in the treatment is the closing of the wound immediately, in order to exclude the air from the cavity of the joint.—When air is admitted into the cavity of a joint it operates as a powerfully deleterious agent upon the cerous membrane lining the cavity of the joint, and requires a high degree of inflammatory action and much constitutional energy to repair the injury. Dry dressing must be put on and as soon as the parts are well secured from the air, the limb, if it be the knee joint, must be bandaged, commencing at the foot and carrying it up to the knee; the wound should be covered with lint, and the knee well bandaged. The object of applying a dry dressing is to favour the healing of the parts without the formation of matter, and of excluding the air from the joint. A poultice must never be applied where joints are cut into, until after the lapse of several days, and the parts exhibit marks of suppuration, or the formation of matter—then it will be proper to apply a poultice.

When the joint is dressed a splint must be applied to the under side of the limb in order to prevent the possibility of motion in the parts; for if motion be allowed in the joint, the new adhesions will be broken up, and a union by the first intention thereby prevented. As the parts swell, the dressing must be loosened.

After the wound is dressed, the dressing immediately over the wound must be kept wet with No. 6, or the tincture of myrrh as a means of exciting adhesive inflammation.

Constitutional Treatment must be early applied unless the system be comparatively clear of disorder. Injuries of large joints, however, are necessarily attended with much constitutional disorder, and more especially if the wound does not heal without suppuration occurring. The bowels are to be regulated by the use of injections; the secretions promoted by giving stimulants, such as capsicum, composition, or simple herb teas; and when there is fever, give small doses of lobelia in combination with the stimulants.

The diet must be light at first, avoiding every thing that is unwholesome, or hard of digestion.

If the wound suppurate, tonics must be given unless the tongue be dry and the patient feverish, and even under these circumstances the spice bitters may be used. Wounds of the large joints require great exertion on the part of the constitution, to repair the injury, creating the necessity for all the support that can be afforded by sti-

mulants, tonics, and by nourishing food, provided the stomach can digest it.

SECTION XI.

BURNS AND SCALDS.

For slight burns or scalds in which the skin is not destroyed, the best application is cold water, either holding the part in a basin of cold water, or apply linen or muslin cloths or carded cotton on the parts, kept wet with cold water or whiskey and water. This is to be continued until the smarting ceases; then cover the parts with an ointment prepared of sweet oil and lime water, or bind dry cotton on, or cover the parts with oiled silk. When blisters are formed avoid breaking the skin until the parts have had time to secrete a layer of lymph on the surface of the burn, which will protect the parts from the action of the air. The best way to open a blister is to pierce it in several places with a needle, and then cover the parts with a thick layer of carded cotton, or soft muslin cloths kept damp with alcohol and water, or whiskey and water, and this continued until the parts cease to be painful; or apply some simple ointment, the one above mentioned is to be preferred.

Avoid removing the dressing until several hours or even a day or more has elapsed. Removing the dressing too soon breaks the tender skin that nature forms on the surface of the burn, and greatly retards the cure. Whatever dressing be applied to a burn, which is found to relieve the pain, whether it be dry cotton, cloths wet with evaporating lotions, sweet oil and lime water, or a poultice of scraped potatoe or carrots, it should be allowed to remain on, at least for several hours, or even much longer, unless there be a necessity for its being removed.

When the outer skin is removed at the time of a burn or scald, I mean the skin that raises up where a blister is formed, the parts should be covered as speedily as possible, with an ointment of lime water and oil, simple cerate, or some other mild ointment or salve. Whilst the ointment or salve is being prepared, the part may be held in cold water or wet clothes laid on to relieve the pain. The ointment must be spread on linen or muslin, and when applied, cloths or cotton may be laid on this dressing, kept damp or wet with cold water, or whiskey and water, to relieve the pain. The under dressing must not be removed for two or three days;

indeed it is better to let the first dressing remain on until a new skin be formed on the burned parts, unless the dressing disagree with the sore and occasion pain.

When a part is seared so as to destroy the skin, from live coals or a red hot iron, a *poultice or plaster* must be applied; for when the under layer or true skin is disorganized, suppuration will take place, and instead of a new skin being formed, as there will be, when only the outer layer of the skin is removed, the parts will heal by drawing together, and thus form a scar or seam in the skin. The poultice recommended by Dr. Thomson, which consists of a compound of slippery elm, white pond lily root, cracker, and a small portion of ginger, all finely pulverized and wet with a strong tea made of raspberry leaves, form as good a preparation probably as can be devised. The poultice will require to be wet occasionally, and when the parts are suppurating freely, a fresh one must be applied daily, until the suppuration is completed, when a salve must be employed to shield the parts from the air, until they are healed. When granulations shoot up, forming what is termed proud flesh, they should be covered with burned alum, or finely powdered marsh rosemary, before the salve is put on.

When there is but little discharge of matter, and in some cases where there is a free discharge of pus, a plaster will suit the burn better than a poultice.

Constitutional Treatment.—Severe burns or scalds generally occasion great prostration of the powers of life, manifested by chilliness, coldness of the surface, extreme prostration of strength, a weak pulse, and sometimes stupor or delirium. Under these circumstances, stimulants and emetics must be given. If an individual receive a severe burn or scald soon after taking a hearty meal, the food will not be digested, and if not thrown off by vomiting, it will oppress the vital powers. It is always safe, and generally highly necessary to give an emetic after a severe burn or scald.

Stimulants.—Stimulants, such as here recommended, given internally, will not aggravate a burn or scald on the surface. By giving stimulants we aid the constitution in maintaining the natural equilibrium of nervous power between the great centres of the system and the surface of the body, which is an important indication in the treatment of all forms of disease, whether general or local. The stimulants to be employed are capsicum, composition, or ginger tea. These stimulants may be given at all times; and when there is fever, broken doses of lobelia should be added to them, or taken separately; and if the skin be very hot and dry,

bathe it with vinegar and water, or spirits and water, to reduce its temperature down to the sweating point.

Vapour Bath.—There is no objection to the use of the vapour bath in cases of scalds and burns, the parts being kept covered by the dressing during the steaming. When the patient remains in a torpid or sunken condition, or the burn or scald becomes very painful after the lapse of a day or two, or at any subsequent period after the first pain from the injury has subsided, the vapour bath will prove especially beneficial, not only in relieving the pain in the parts, but it will aid the healing efforts of the constitution. I recently attended an old lady who had her foot badly scalded, and not being treated properly in the first place—the dressing being frequently removed, the lymph which was thrown out by the raw surface, designed to form a new skin, was taken off by the frequent changing of the dressings, and the scalded surface assumed an unhealthy appearance, the foot was extremely painful, which continued for weeks with but little intermission, except when the parts were wrapt in wet cloths and cold water applied. All the applications that were made to the foot failed of exciting the healing power, or to make any favourable change in the part until the vapour bath was resorted to; the foot was steamed from a half to three quarters of an hour at a time without any dressing on, and this repeated daily until a new skin was formed over the foot. This patient experienced more benefit from a general steaming than when it was merely applied to the foot.

To prevent Deformity.—Great deformities are apt to take place after severe burns, when the true skin is destroyed. If, for instance, the palm of the hand and between the fingers be badly burned, the natural tendency in the parts will be to contract: the hand to be clenched and the fingers to unite together. This is to be prevented by binding a splint on the back of the hand, the splint being sawed at the extremity, so as to furnish a separate splint for each finger. The parts must be first dressed, and then the splint applied. Especial care must be observed to interpose dressing between the fingers to prevent their uniting together. I once witnessed a very painful and bloody operation on a man whose arm had grown fast to his side in consequence of a severe burn, the proper care not having been taken to prevent the burned surfaces from coming together when healing. Severe burns on the neck are almost necessarily followed by more or less deformity. I have seen several cases where the chin was drawn down to the collar bone, the patients being unable to raise the chin from the breast. A severe burn on the inside of the arm at the elbow would naturally tend to bend the arm when healing; and if allowed to heal in this position, the patient will ever after be unable to

straighten the arm. This deformity is to be prevented by applying a splint to the back of the arm, so as to keep the limb straight.

SECTION XII.

CHILBLAINS.

Chilblains are most liable to occur on the heel, the toes, and sides of the foot. The parts affected are somewhat swollen, red, and, at particular seasons of the year, or, on warming the feet by the fire, they itch very much and are painful.

Causes.—Chilblains are produced by severe coldness in a part, and being too suddenly warmed by the fire.

Preventive measures.—When the feet or hands are benumbed by cold, and great pain is occasioned as they begin to warm, they should be placed in cold water and kept there until the parts cease to be painful, when they are removed from the cold water; or the parts may be bathed or rubbed with alcohol, whiskey, opodildock, or spirits of camphor, and kept away from the fire, or from a warm room, as long as there is pain experienced.

Treatment.—Chilblains, unless properly treated, may continue to be occasionally swollen, and prove a source of great annoyance for years, unless proper means be taken to overcome the debility of the vessels of the parts. A very good plan of treating chilblains is to bind on the parts a poultice composed of wheat bran, soft soap, and fine salt; the poultice to be continued on an hour or two at a time, and then the parts to be bound up with oiled silk, and not allowed to be near the fire. The oiled silk to remain on several days. Another plan of treatment is to rub the parts with oil of turpentine, and then rub on stimulating ointment on a piece of bladder, or silk oil cloth, and bind it on the parts. This application to be repeated every night until the parts are restored to their natural condition.

SECTION XIII.

TREATMENT OF FROZEN LIMBS.

When a part is benumbed or frozen, the most important indication in the treatment is to regulate the temperature around the frozen part, carefully guarding against warmth until the vessels recover sufficient strength to carry on the circulation. A frozen part should never be thawed by the application of external warmth, or it will be followed by violent inflammation if not by mortification. It would seem that the application of warmth to a frozen part, destroys the natural equilibrium of nervous energy between the great centres of the system and the surface of the body. In such cases the blood which is attracted to the surface by the warmth, is not circulated or returned back as it should be, a tendency to putrefaction or disorganization occurs, attended with violent inflammation, followed perhaps by mortification.

A part that is frozen must be kept in cold water, even adding snow or ice to it, and this continued until the parts are completely thawed, and then the temperature around the part should be increased *very gradually*, not allowing a sudden change from cold to warmth. Covering the frozen parts with snow is a good practice.

If a person besides having his limbs frozen should be greatly benumbed and chilled throughout the body—nearly frozen to death—he should not be taken into a warm room, but be laid in a room without fire. It would be even better that the patient remain in a barn than to be placed in a temperature much above that of the external air. I have heard a case related of a man frozen severely and stiff, who was restored by being placed in a cask of pickled cabbage, commonly called sour-crout.

Stimulants must be given to support the living powers.—Cayenne pepper, composition, ginger tea, carbonate of ammonia, warm brandy toddy, and No. 6, in warm water may be employed as stimulants; and wine whey, essence of beef or chicken tea may be given as nourishment, until the powers of digestion are increased so that other kinds of food can be digested. Stimulating injections will aid in restoring animation.

When a part of a limb is frozen without the body being very much benumbed with cold, the patient may remain in a comfortably warm room, observing the precaution to keep the frozen part in cold water, or enveloped in snow, until it be thawed; and then the parts may be wrapt in cloths kept damp with whiskey, alcohol,

spirits of camphor, or vinegar. A most important indication in the treatment of frozen parts is to "keep down the outward heat" of the injured parts, or a stagnation of the blood in the parts will be the consequence. When through improper management in the first place or from other causes, a part that has been frozen becomes inflamed, threatening mortification, a poultice must be applied, composed of elm, white pond lily, cracker and ginger; the poultice to be kept wet with cold water, and the limb elevated. The yeast poultice mentioned in the materia medica may be employed. The patient should also be placed under active constitutional treatment, in order to aid the efforts of nature. A full course of medicine should be administered and frequently repeated in all cases where mortification is threatened, and stimulants given freely to excite the secretions, and increase the power of action in the enfeebled vessels, thus lessening the tendency to congestion of blood in the parts. It is common in the old practice to prescribe bark and wine in cases of mortification; such remedies, however, when the secretions are suspended, the tongue being dry and the skin dry and harsh, will necessarily prove injurious. But if a patient in the condition above described, be carried through a course of medicine, and followed by a free use of cayenne or composition tea, adding small doses of lobelia, the symptoms will generally assume a more favourable aspect, and certainly never be aggravated by it.

Tonics.—There is a condition of the system when barks and wine will prove of great benefit in cases of mortification, or in cases of recovery from the effects of freezing. When the tongue is cleaning and moist, and the surface of the body inclined to moisture, tonics may be given freely. Peruvian bark, quassia, columbo root, Virginia snake root, balmony, golden seal, quinine, poplar bark, or spice bitters, may be employed either separately or combined together.

Diet.—The diet in mortification should be of the most nourishing kind, provided the digestive powers be not too far prostrated. When the tongue is dry and parched and the patient feverish, gum arabic or slippery elm mucilage, essence of beef, barley-water, &c. will be the most suitable. But when the tongue is moist and cleaning, the skin warm and relaxed, the patient may take eggs, beef steak, mutton, chicken, wild game, custards, milk boiled, milk porridge, &c. In some cases of extreme debility, wine whey and even wine may be given.—No. 6 taken in warm water sweetened is an excellent tonic and stimulant.

SECTION XIV.

BILES.

Treatment.—In the earlier stages of biles, warm fomentations and poultices are required to soften and relax the parts and to favour suppuration.

The core of a bile consists of dead cellular tissue, and inflammation is necessary to bring on suppuration or the absorption of the parts surrounding the dead cellular tissue, in order to separate it from the living parts. It is therefore better to avoid opening a bile too soon, as that may interfere with the operations of nature, and retard rather than hasten the cure. There is a time, however, when a bile should be opened and not allowed to break spontaneously, or it may destroy so much of the skin as to leave a large scar.

After a bile has been opened, the parts must be poulticed until the swelling and inflammation subside. In all running sores it is better to have a poultice spread on oiled silk, or something that will prevent evaporation. As a general rule poultices should be made more stimulating after an abscess or bile is opened than before, and if the parts be much relaxed and colder than natural, equal portions of composition powder and slippery elm will form a very good poultice.

Washing or syringing the cavity of biles with a strong tea of bayberry or sumac, adding a portion of No. 6, is very useful, it promotes granulation and assists the healing action.

When the matter is discharged and the swelling in a great degree disappeared, poultices may be laid aside and salve spread on soft muslin or linen substituted, and wash the sore occasionally with the tea above mentioned. When the cavity of the bile is obstinate in healing, No. 6 may be poured into it, or wet a piece of lint with the drops and let it remain in the sore, applying a salve over the parts.

Constitutional Treatment is not required in common cases of biles, except it may be to lessen pain by relaxing the system or with a view to prevent other biles. Biles very often occur after scarlet fever, measles and small-pox.

SECTION XV.

CARBUNCLE.

The carbuncle never occurs in a healthy constitution. It may arise from the same cause that produces biles, but instead of healthy inflammation observed in case of a bile, terminating in the formation of what is termed healthy or laudable pus, it assumes an unhealthy character accompanied by burning pain. The swelling assumes a dark red or livid appearance, and instead of pus being formed or contained in a single cavity and with a core in the centre, as in the case of a bile, the swelling becomes soft and feels spongy and small vesicles or belbes are formed on the skin as in erysipelas, and an acrid fluid is discharged from numerous openings or small ulcers on the parts.—The fluid which escapes resembles a mixture of flour and water; the small ulcers run together and form openings sufficient to allow portions of the dead cellular tissue to escape resembling shreds of tow or cotton.

The cheek, neck, and back are the parts most liable to carbuncle.

Carbuncle is not in general dangerous, yet it is slow in its progress, and difficult of cure.

Treatment.—The local treatment in the first place should consist of warm fomentations and poultices. Experienced surgeons advise the early opening of the carbuncle, and applying a poultice made of port wine and ground flax-seed. A poultice of composition and elm, or of yeast and ginger may be used in the place of the port wine poultice. Syringing the cavity with strong bayberry tea, and then pouring in a portion of No. 6 will be of especial benefit in exciting a more healthy action in the parts. Local steamings will also aid the living parts to cast off the dead cellular tissue.

Constitutional Treatment will be required in all cases of carbuncle, employing means to correct the diseased condition of the general health, and to strengthen and support the constitution. In the first place the patient must be carried through a full course of medicine every few days, and during the intervals use freely of composition, pepper or spice bitters. As the constitutional symptoms wear a more favourable aspect, cleaning of the tongue, a general warmth through the body, with a moist skin, then tonics, such as bark and wine, quinine, gentian, columbo, and Virginia

snake root must be given freely, and the patient allowed a nourishing diet, eggs, milk porridge, custards, beef steak, mutton chops, boiled chicken, wild game, stale bread, cream toast, &c.

Fresh Air.—When the state of the weather and the condition of the patient will admit of it, he should ride or walk out to receive the benefit of fresh air and exercise, observing especial care, however, to keep warm.

SECTION XVI.

ABSCESS OF THE FEMALE BREAST.

Gathered breast as it is commonly termed, usually occurs *after confinement.* It is generally caused by a large accumulation of milk, exposure to cold, or from sore nipples. The frequent exposure of the breast to the air, more especially when the skin is covered with perspiration is a common cause of gathered breast.

Treatment.—As soon as the breast begins to be hard or painful from too great a flow of milk, it should be bathed frequently with some evaporating lotion, whiskey, brandy, warm vinegar or spirits of camphor and water, or cloths applied and kept moist with some one of the above articles. This will lessen the secretion of milk. But if the breast cakes and becomes painful and cannot be eased by the means above mentioned, together with frequently drawing the breast, it should be steamed and covered with a plaster of salve, to keep the skin soft and moist. A hole must be cut in the centre of the plaster to admit the nipple. When a lump is formed in the breast from taking cold in the part or from irritation of the nipple, steaming the breast frequently and applying a plaster of salve, or a poultice composed of equal parts of green lobelia and elm, if early applied will generally prevent suppuration, easing the pain and scattering the swelling.

If the system be much disordered, an emetic or a course of medicine will prove beneficial in removing obstructions in the breast, and lessening the pain. Placing the patient under the influence of lobelia given in broken doses so as to occasion slight nausea will also be useful in moderating pain in the breast; and by the relaxation thus produced will aid in removing the obstructions.

If the use of the above means fail of discussing the swelling,

and the breast continues to be very painful and throbbing, warm poultices must be applied with a view to favour suppuration and to bring the matter as speedily as possible to the surface. When suppuration is about to take place there is usually a severe throbbing pain in the part, and the patient experiences chilliness, and a blush appears on the skin covering the swelling.

It is better to delay opening a gathered breast until the matter approaches near the surface. After the abscess is opened or breaks spontaneously, a poultice composed of composition and elm or flax-seed; or of elm, white pond lilly, and ginger must be applied, and the poulticing continued until the discharge of matter has nearly ceased, when the parts may be covered with some kind of salve, and moderate pressure applied to favour the union of the sides of the cavity.

SECTION XVII.

WHITLOW OR FELON.

Whitlow is an extremely painful swelling, mostly confined to the fingers, and particularly to the middle or last joint, or it is seated under the nail.

This painful affection often becomes protracted in duration in consequence of pus or matter being formed beneath the tendons, or under the membrane that covers the bone requiring a considerable length of time for it to find its way to the surface.

Causes.—Felon or whitlow is sometimes caused by a bruise, in other instances it is occasioned by a slight wound on the skin; even the scratch of a pin, if frequently irritated or not protected from the air, may affect the parts near the bone and produce a felon. Occasionally it comes on without any appreciable cause.

Treatment.—In the outset of a felon, placing the hand in alcohol, brandy or vinegar, and continuing it several hours at a time and afterwards wrapping the finger in cotton kept wet with spirits of camphor, alcohol, or vinegar, will sometimes prevent the formation of matter. And even though it should fail of preventing suppuration it will mitigate the pain. A plaster composed of lime and soft soap, is a favourite remedy with some for whitlow or felon.

If the swelling continue to increase attended with severe throbbing pain, the above or some other form of poultice must be kept on the parts, wetting it occasionally as it becomes too dry, and when there is evidence of the existence of matter in the part, it should be opened either with a lancet, or in the way Dr. Thomson recommends, which is, to burn pieces of spunk, about the size of a large pea, on the part, until the flesh becomes deadened down to the matter, and then to open it. When this method is employed, the hand and the diseased finger, except the part on which the spunk is to be burned, should be held in cold water during the operation. A pair of forceps, or tweezers, may be used in setting fire to the spunk and placing it on the finger. Dr. Thomson does not advise this plan of burning spunk upon the part, until there is a purple appearance in the part indicating the approach of matter towards the skin.

Another plan recommended by Dr. Thomson, to facilitate the approach of the matter to the surface, is to slack a small piece of lime on the finger. In doing this, the hand should be placed on wet cloths, and a small roll of the same placed at each side of the finger, to prevent the lime from falling off. A piece of unslacked lime, about the size of a shellbark nut, is to be laid on, then wet, and allowed to remain as long as the patient can bear it, or until it becomes cold. This may be repeated, occasionally, until there is some appearance of matter, when an opening should be made.

Before an opening be made, any kind of emollient poultice may be applied to favour suppuration; but after pus begins to be discharged, a stimulating poultice must be employed. Equal portions of slippery elm, white pond lily and ginger, form suitable compound for the poultice. Indian mush, flax-seed, stewed in milk, or any other soft substance, may be employed, adding a portion of cayenne pepper, or ginger.

When the swelling and inflammation has in a great degree disappeared, poulticing may be omitted, and salve applied.

When matter is discovered under the nail, a portion of the nail must be cut away to allow the pus to escape.

When an opening is made by a lancet in the earlier stages of a felon, the matter being deeply seated, care must be observed to avoid cutting open a joint. A lancet may be safely introduced down to the bone, except immediately at the joint.

Constitutional Treatment.—The pain attending a whitlow, or felon, may be mitigated by using means to excite perspiration, and by placing the system under the influence of lobelia, given in broken doses, to the extent of producing slight nausea.

If the system be much disordered, an emetic, or a full course of medicine, will be especially beneficial. Patients may some-

times procure sleep, by having the hand raised upon pillows, and taking tincture of lobelia in sufficient quantities to cause slight sickness.

SECTION XVIII.

HIP DISEASE.

Disease of the hip joint is of very common occurrence; and although it prevails most among children, still the disease not unfrequently attacks adult persons.

Causes.—Although the hip disease be occasioned in many instances by a fall, yet it rarely happens in persons of sound and vigorous constitution. A bruise upon the hip that occasions scarcely any inconvenience to one of a healthy constitution, would be liable to cause the hip disease in one of feeble organization, or who is of a scrofulous constitution.

Symptoms.—In the majority of instances of hip disease, the first thing of which a patient complains is a pain in the knee. The pain is, in some cases, slight at first, in other instances it is severe from the commencement, preventing the patient from sleeping at night, except at short intervals. The patient is observed to limp, and the knee becomes bent. As the disease advances, the patient complains of severe pain about the hip, or groin, yet in some cases the pain is almost exclusively confined to the knee during the whole progress of the disease.

Duration of the Disease.—The hip disease is usually slow in its progress, seldom terminating its course in less than a year. Occasionally, under favourable circumstances, and a proper course of treatment, the parts resume a healthy condition in the course of a few months; but, unfortunately, in the great majority of cases, the disease continues for years, though seldom attended with severe pain, except at intervals, and more especially in the early stage, and when suppuration is about to take place.

Termination.—Few patients recover from the hip disease without more or less distortion of the limb of the affected side. Sometimes the inflammation of the joint terminates in resolution, still this is of

very rare occurrence, for the parts possess so low a degree of vitality that the restorative efforts of nature are insufficient to prevent disorganization of the diseased parts in unhealthy constitutions. A part of the body that is well supplied with red blood, will recover from disease much more readily than parts which receive but a small supply of arterial blood. Hence the tissues about the joints receiving very little red blood are very slow to recover from disease; most commonly the inflammation terminates in suppuration about the joint, the matter taking different directions, sometimes pointing to the surface in the region of the joint; in other instances the matter travels down into the groin forming a fluctuating tumour; or it may pass down the thigh, sometimes almost to the knee. In most instances the parts finally heal, but the joint remains stiff, and the limb shortened. The head of the thigh bone is sometimes entirely destroyed leaving the limb several inches shorter than the sound one. In very feeble constitutions the disease sometimes terminates fatally, the powers of the constitution being worn out by disease.

Treatment of Hip Disease in its early stage.—In the outset of this disease the means chiefly to be relied upon, are the vapour bath, rest, stimulating applications, occasionally an emetic, broken doses of lobelia, and warm teas to promote perspiration.

The Vapour Bath may be administered daily during the early period of the disease. When the patient has been steamed twenty minutes or half an hour, he may be showered with moderately cold water, rubbed dry and bathed with vinegar or spirits. After the bath the hip must be covered with stimulating ointment, or with salve to which a portion of pepper has been added. The parts should then be covered with oiled silk, or a rabbit skin or buckskin to promote perspiration and keep the parts warm.

Rest is very important in the early period of the disease. A splint carved or moulded to fit the limb in a straight position or nearly so, may be applied with benefit in the early stage of the disease. It will not only favour the cure by keeping the joint at rest, but may prevent deformity of the limb, provided the disease terminate without the occurrence of suppuration. After the disease becomes permanently fixed, then to confine the patient with a splint will be useless or even injurious; he should be allowed to use crutches, and when the weather will permit to have the benefit of the open air.

Emetics must be given whenever the condition of the patient demands their employment. It is in the early period of the disease, however, that they are more particularly beneficial. The proper time for giving an emetic is shortly after a vapour bath has been

administered. If the patient be very feeble and pale, the emetic of lobelia should be combined with stimulants, as composition, pepper and bayberry, or with No. 6 and bayberry. There is no period of the disease when an emetic will not prove of benefit if the stomach be foul, or when the patient is suffering severe pain.

In a more advanced period of the hip disease, it will be useless as before mentioned to keep the parts at perfect rest, or to confine the patient by the use of a splint. Neither will it be necessary to give much medicine, except occasionally as the condition of the patient demands it. Cleanliness, fresh air, nourishing diet, salt water bath or sponging the body with salt water, and friction of the surface are chiefly to be relied upon when the disease has become permanently fixed. When the parts are painful, however, or the general health disordered, medicine must be employed.

When suppuration takes place, an abscess may be formed at the hip, or the pus may pass down into the thigh, forming a fluctuating tumour there. All experienced surgeons now agree that abscesses about the hip should not be opened until at a late period, or when the matter comes so near the surface as to threaten the destruction of a considerable portion of the skin, when it is better to make a small opening with a sharp lancet, drawing off only a part of the matter at a time, and then closing the opening with a piece of adhesive plaster.

Abscesses in the thigh often contain from half a pint to a quart of pus, which being secreted at the hip joint passes down between the muscles and thus collects in the thigh. Where an abscess is formed in a part thus remote from the joint it may be opened with safety.

When pus is discharged either spontaneously or by opening the abscess, every means should be employed for sustaining the patient's strength; and the use of tonics, nourishing food, exercise in the open air, salt water bathing, a change of residence, for instance, from a city to the country, to the seaboard, or to a mountainous or pine country should be resorted to.

Sick children are apt to be indulged in eating sweet cakes and various kinds of dainties between meals, which impair digestion and destroy the natural appetite. And although the patient may have the gratification of eating a sweet cake he loses not only the enjoyment but the benefit of a meal. When patients who are recovering from sickness, and more especially children, require food between meals, it should consist of such articles as milk porrigde, toast and milk, crackers, stale bread, custards, or crusts of bread.

Pepper Poultice.—In the earlier stages of the hip disease and

also after an abscess has formed, and where matter has been discharged and the parts remain in a pale and flaccid condition, a poultice composed of equal portions of cayenne pepper and slippery elm powder, may be applied occasionally with decided advantage.

Warm Fomentations.—In the earlier stage of hip disease, when the parts are painful, besides administering vapour baths, bags of hops, or of bitter herbs, wet with hot vinegar, may be applied to the hip, and kept warm by hot bricks or bottles of hot water.

Pressure.—Whenever the hip will bear pressure without occasioning pain, it must be applied, with a view to support the enfeebled and relaxed vessels. This may be done by a bandage of flannel or of muslin, put around the hip. After pus has formed and discharged, or the parts are still secreting matter, pressure should always be applied, in a degree suited to the condition of the parts.

Children who inherit scrofulous constitutions, are in general, favoured with superior intelligence, so that although they may be physicially weak, yet superiority of mental power enables them to pursue professions which require intellectual rather than muscular strength. It must be born in mind, however, that children of scrofulous constitution, will not bear close confinement in crowded school rooms without materially injuring their health. It is better in such a case that their education be neglected, in early life, and that they receive the benefit of the open air which will prove the most effectual means of improving the constitutional health.

SECTION XIX.

WHITE SWELLING.

The knee joint is observed to be more frequently affected with white swelling than any other of the joints. It seldom happens in others than in those of feeble constitution, and more especially in the scrofulous. The hip disease so prevalent among children of bad constitutions is a disease of the same character as white swelling. The hip disease prevails mostly in children under twelve years of age; whereas, white swelling is most prevalent in adults.

Causes.—The most frequently exciting cause of white swelling is exposure to cold. A person of a sound constitution may bear an exposure to cold without that inconvenience which would occasion such a degree of debility in one of scrofulous constitution as to cause white swelling.

When the vitality of a part is reduced below a certain point, the constitution establishes inflammatory action with the design of sustaining the vitality of the part. Thus the membrane that lines the cavity of the knee joint by the influence of cold, may be so far deprived of its vitality, as to call upon the constitution for an increased supply of blood in order to prevent the death of the parts, and to repair the injury already sustained in the affected parts. A new supply of blood is sent to the knee, an inflammatory action is established which under favourable circumstances may terminate in resolution—the parts being restored to a healthy action. Under circumstances less favourable the inflammation may terminate in adhesion—the joint being stiffened but without any destruction of the parts. Under circumstances still less favourable, for instance, where the constitutional health is very bad, or the vitality of the diseased parts reduced beyond the power of reparation, then suppuration of the parts will take place, matter will be discharged, and the disease necessarily become of long continuance and extremely painful. Portions of bone are destroyed in many instances by the process of absorption.

Treatment.—The indications for the cure of white swelling are to correct and support the general health, and to employ such local means as will aid in bringing the inflammatory action in the

diseased parts to a favourable termination—either in resolution, or anchylosis (stiffening of the joint) or if suppuration occur to favour the occurrence of adhesive inflammation and stiffening of the joint, which will be the only "safeguard of the patient," after suppuration has taken place.

An occasional course of medicine should be administered in the earlier stage of the disease, or at any period when the patient is suffering severe pain.

Besides the course of medicine, the spice bitters should be taken two or three times a day, and a dose of composition, or of bayberry and pepper at night. These remedies, however, may be given in a different form, to suit the fancy of the patient. Thus the No. 3 pills will supply the place of the bayberry and pepper, and when the tongue is dry, the compound lobelia pills will be appropriate.

Injections moderately stimulating and containing a portion of lobelia, will be useful not only to assist the action of the bowels, but by the influence which they exert over the circulation of the lower extremities. An injection of composition tea, adding a portion of lobelia powder, retained fifteen or twenty minutes, or allowed to remain in the bowels, will seldom fail of mitigating pain in the diseased limb, and it will also in many instances cause free vomiting.

Tonics.—In a later period of the disease, and more particularly where suppuration has taken place, and the parts are discharging matter, bitters may be employed with a view to strengthen the digestive powers, so as to allow the patient to take nourishing food, to support the constitution in her curative efforts. In the earlier stages of the disease, composition, pepper, spice bitters, and lobelia, are generally indicated, whereas, in its more advanced stages, tonics, syrups, generous diet, fresh air, and gentle exercise, are called for.

Local Treatment.—In the earlier stages of white swelling, and all affections of this character, steaming and fomentations will be found beneficial. The steam may be applied for half an hour, or even an hour, at a time, and after this the stimulating liniment may be applied to the parts, and then bind them up in oiled silk or flannel. The limb must be kept warm and at rest.

Bandages.—Even in the earlier stages of white swelling, moderate pressure will be beneficial, provided it can be applied without occasioning too much pain. If the disease be in the knee joint, the limb must be bandaged from the end of the foot to the knee, first applying stimulating ointment, No. 6, or pepper sauce.

Dr. Thomson's Poultice for White Swelling.—Take fresh comfrey root and scrape or grate it fine, until you obtain half a pint. To this add the white of two or three eggs, well beaten, and a gill of brandy, or sufficient to make it of a proper consistence for a poultice; spread this and bind it on the affected parts as firmly as can be borne, renewing it, or wetting it with brandy, as often as it becomes dry.

When the parts suppurate, the disease becomes extremely painful and protracted, in some cases, to several years' duration. In severe cases, the constitution may become exhausted, the patient sinking under the effects of the disease.

In treating this and every other disease, attended by inflammation, it should be borne in mind that inflammation is not the first change in the parts from a healthy condition. Coldness and loss of vitality in the part is the first change from a healthy state, and inflammation follows as an effort of the constitution to preserve the vitality of the parts, and protect the joint from destruction; and although these efforts are frequently baffled from want of constitutional energy, or from great debility of the parts diseased; still the design of the inflammation is the same, and the treatment should be directed to correct and support the general health, and to promote the circulation in the diseased joint by the various means already mentioned.

SECTION XX.

ULCERS.

Some medical writers divide ulcers into three classes, namely, *healthy, unhealthy, and specific* ulcers. An ulcer is generally of a healthy character where it occurs in one of a healthy constitution, and more especially in the young and robust; whereas the aged and feeble, and especially those of intemperate and dissolute habits, are subject to ulcers of an unhealthy character, and very difficult of cure. Syphilitic, cancerous, and scrofulous ulcers, are generally considered as being of a specific character.

1st. SIMPLE OR HEALTHY ULCER.

Causes.—Simple ulcer arises from some local injury, a bruise, cut, or burn; or it may follow abscesses or biles.

Characteristic marks of the healthy Ulcer.—The surface of this ulcer has a florid appearance, raised above the edges, discharges a cream-like pus, that has no odour; "and the edges of the sore are whitish and nicely adapted to the surface."

Treatment.—The simple healthy ulcer seldom requires any thing more than to be protected from the air, by the application of some simple salve.

A healthy ulcer may become converted into one of an unhealthy character by frequent exposure to the air or to other injurious influences. If proud flesh rise up in the sore, a poultice of finely powdered marsh rosemary, bayberry, or alum, must be sprinkled upon the parts and salve applied; or instead of the powder apply dry lint to the proud flesh, cover the edges of the sore with salve, and apply moderate pressure to the sore.

Carrots boiled, and mashed fine, adding a little lard, constitute a favourite poultice, in cases of sores and ulcers.

A great variety of salves and plasters, are employed as a cure for sores. It is not of much consequence what a salve is made of, for common sores, as the great object is to preserve the sore from the air.

Cold water dressing.—Cloths wet with cold water, applied to sores promotes the healing action. This kind of dressing is more particularly applicable to cases attended with heat and inflammation. Where the cold water dressing causes unpleasant feelings in the part, warm water may be substituted.

2d. UNHEALTHY ULCERS.—SORES OF LONG STANDING.

An unhealthy ulcer may be extremely irritable, inflamed, and painful; or it may be indolent and almost devoid of sensibility.—In aged persons a bruise upon the shin is apt to occasion an unhealthy ulcer, "the parts being too weak to carry on the actions necessary to its recovery."

A great diversity of appearances are presented by unhealthy ulcers.

The irritable ulcer is generally characterized "observes Doctor Gibson," by the following appearances. The edges of the sore are ragged, undermined, and sometimes almost serrated. The parts for some distance beyond the ulcer are red and inflamed and often œdematous. Irregular hollows occupy the bottom of the ulcer, and contain a thick greenish or reddish matter, which is so extremely acrid as to excoriate the adjoining skin. In place of granulations may be found a white or dark red spongy mass, extremely painful, and shedding blood upon the slightest touch."

"*Inflamed Ulcers.*—Here you have a serous discharge from the sore; a bloody ichor, composed of serum and the red particles of blood; a disposition in many cases to slough; the surface covered with a brown incrustation; and the skin and surrounding parts highly inflamed."—*Castle's Manual of Surgery.*

"*Gangrenous Ulcers.*—In ulcers of this kind, the surface is perfectly free from any discharge; the surrounding edges of a livid appearance, with small vesicles or blistered spots on them; and the patient suffers much from irritative fever."

Indolent Ulcer.—This is the most common kind of ulcer. The edges of the sore are raised, and rounded, giving the appearance of a deep cavity to the ulcer. The surface of the sore is covered to a greater or less extent with a slight coloured crust, and is extremely insensible to the touch. In general there is a free discharge of a tenacious matter from the sore, differing essentially from the healthy pus. This kind of ulcer is in almost every instance seated on the leg, and the nearer it is to the ankle the more difficult it is of cure.

TREATMENT OF UNHEALTHY ULCERS, OR SORES OF LONG STANDING.

Constitutional Treatment is in general necessary in the cure of unhealthy ulcers, besides its influence in exciting a healthy action in the vessels of the diseased part; a proper course of constitutional treatment secures the constitution from the bad consequences that might otherwise ensue from the healing of long standing ulcers. I have known ulcers of many years standing, to be entirely healed in a short time, under Thomsonian treatment, and the general health of the patient still continue to improve.

Unhealthy ulcers will in many instances be observed to assume a more healthy appearance, after the patient has been carried through a course of medicine. In cases of long standing the vapour bath and emetic, or a full course of medicine will be required

to be administered as often as every week or two, and repeated several times, together with the daily use of stimulants, capsicum, composition, and tonics, and a proper course of local treatment, before the sore will assume a healthy condition, and secrete the cream-like pus, observed in healthy ulcers.

In confirmed drunkards, ulcers are often very difficult to heal; constitutional and local treatment proving ineffectual, so long as the habit of excessive drinking is continued in.

Besides an occasional course of medicine, the following plan of giving the medicines (first proposed to me by Dr. A. C. Logan,) I have found well adapted to almost every case of chronic disease, namely: A dose of Thomson's anti-canker medicine in the morning before breakfast, a dose of the No. 4 bitters before dinner, and composition at night. If the bowels be costive, from three to six of the compound lobelia pills should also be taken at bed-time.

Dr. Logan's Alterative Syrup.—This syrup is made by combining equal portions of tincture of lobelia, No. 6, and simple syrup of sugar. To be taken in doses of from one to two or three teaspoonsful, repeating the dose several times a day, but particularly shortly after or within an hour or two after meals. The use of this syrup fulfils many important indications for improving the general health.

Sarsaparilla Syrup.—In mercurial syphilitic, or scrofulous ulcers, the simple syrup of sarsaparilla, or a syrup made of a compound of sarsaparilla, guaiac shavings and yellow dock root, will be found useful. Pipsissawa, bruised and steeped two or three hours, to make a strong decoction, and this drank freely, will supply the place of the above syrups.

Local Treatment in Unhealthy Ulcers.—In the first place, stimulating and astringent poultices must be employed to stimulate and give tone to the enfeebled vessels; and when the ulcer has begun to secrete thick yellow or cream-like matter, and healthy granulations are formed upon the surface of the ulcer, then fresh salve may be applied. If the ulcer be on the leg, the limb should be bandaged, commencing at the end of the foot and extending the bandage above the ulcer, so as to apply moderate and equable pressure to the limb. This will, in general, enable the patient to walk out, or to pursue his daily avocation, the bandage furnishing support to the blood vessels, aiding them to carry on the circulation.

Indolent ulcers may require actively stimulating poultices, such as a compound of cayenne pepper, bayberry and elm, or of composition powder. Dr. Samuel Thomson informed me that he had

cured indolent ulcers by applying the dry powder of cayenne pepper, brown lobelia and bayberry, and then administering a course of medicine.

Another plan of treating unhealthy ulcers, is to fill the ulcer with bees-wax and Burgundy pitch melted together and applied as warm as the patient can bear. This is to be bound on, and renewed as often as may be required.

Change of Remedies.—Every one who has treated ulcers of long standing, must have observed the utility of occasionally changing the local treatment. An application that will answer well at one time may prove useless, or even worse than useless, at another.

The bark of the root of wild indigo mashed to a pulp, and combined with slippery elm so as to form a soft poultice, is a valuable application in cases of indolent ulcers.

Prepared chalk and linseed oil rubed together to the consistency of putty, and applied to old sores, will often effect a cure where all other general remedies had failed. As the putty becomes too dry, more oil may be applied or fresh putty put on.

Loaf Sugar finely powdered, is an admirable remedy in cases of ulcers.

The *extract of red clover*, (Thomson's cancer balsam,) has been highly recommended by some practitioners of the old school, as a valuable remedy in indolent ulcers. The extract of sheep sorrel may be used for the same purposes.

It must be borne in mind, however, that in cases of long standing sores, a course of medicine should be administered and repeated, if necessary, in order to prevent any bad effects that might otherwise arise from the healing up of ulcers.

To Prevent a Return of Ulcers.—When an old sore has healed, the part should be bound in flannel, wetting it every day with No. 6. The flannel will not require changing, as the myrrh will prevent its becoming in the least degree offensive. Benjamin Thomson, formerly of Boston, showed me a flannel bandage that he had worn around his shin two years, and by having it wet occasionally with No. 6, it was entirely devoid of offensiveness, and afforded a protection against ulcers, of which he had been many years subject to.

Gangrenous Ulcers.—"In ulcers of this kind, the surface is perfectly free from any discharge; the surrounding edges of a livid appearance, with small vesicles or blistered spots on them; and the patient suffers much from irritative fever."

Treatment.—Where a part is threatened with gangrene or mor-

tification, the yeast, sassafras, or charcoal poultice, should be applied, and be kept wet with cold sassafras tea or whiskey, and the patient carried through a course of medicine, followed by the free use of cayenne pepper tea, third preparation of lobelia in bayberry tea; the compound lobelia pills, ginger or composition tea. For nourishment, give wine whey, essence of beef, or any other nutritious food that may suit the condition of the stomach.

If the parts be excessively hot and inflamed, the poultice may be kept wet with the tincture of lobelia, simple water, or with wild indigo root tea.

Varicose Ulcers.

Ulcers arising from diseases of the Veins.—The veins of the leg are more liable to disease than veins in any other part of the system, giving rise to the formation of ulcers along the course of the larger veins. The circulation of the blood being impeded or obstructed by the diseased condition of the vein, adhesive inflammation is established, forming a small tumour under the skin; the skin over the tumour is observed first to roughen and peel off, and then a crust is formed, and finally an ulcer breaks out. These ulcers may, in most instances, be healed without great difficulty, but the vein continuing diseased, new ulcers are formed, and in this way, they continue to break out until by frequent ulceration the vein becomes obliterated, when the ulcers will cease to return.

Treatment.—Besides adopting the usual means for restoring the general health, when it is disordered, the limb upon which the ulcer or ulcers exist must be accurately bandaged from the foot to the knee, or a laced stocking worn, for the purpose of supporting the debilitated veins of the leg and to assist them in carrying on the circulation, by which the tendency to obstruction will be lessened.

In the selection of local application for the ulcer we must be goverened by the circumstances of the case. If the parts around the ulcer are swollen and inflamed, poultices, or cold water dressing must be applied, or if the ulcer emits an offensive odour, keep cloths wet with whiskey on until the inflammation subside, when fresh salve may be substituted, or apply a paste made of prepared chalk and linseed oil. This hardens and maintains an equable pressure to the ulcer, supporting the weakened vessels and preventing proud flesh. The dressing to be changed daily.

Old ulcers are apt to become spongy, or filled with proud flesh, and continue to keep sloughing. In such cases, pressure must be applied to support the vessels and prevent proud flesh. A mix-

ture of prepared chalk and linseed oil, formed into the consistence of dough, may be put in the cavity of the ulcer, and changed as often as the circumstances of the case may require.

Friction.—Rubbing the limb briskly every morning and evening may prevent the formation of new ulcers by removing obstructions to the circulation of the blood in the veins.

Rest and Position.—When the ulcer is in an irritable condition, and the parts surrounding it swollen and inflamed, the patient should refrain from walking much, but keep at rest, with the affected limb elevated on a chair while sitting up.

Pressure.—In cases of old sores, and in all cases where an ulcer is spongy or contains proud flesh, it is important to apply pressure with a view to support the capillary vessels of the part. If this is not done, the ulcer will not heal in many instances for years. We often see ulcers fill up with spongy flesh, but the vessels being too weak to carry on the circulation in the part, the blood stagnates and the parts that are spongy slough away, and in this way many ulcers continue to fill up, and then slough off in regular succession for even years, which might be cured by applying the mixture of prepared chalk and linseed oil, formed to the consistency of soft paste. This paste is to be spread on linen or muslin, and bound on, and the dressing changed once a day. This mixture hardens and will make the ulcer feel very sore. If the ulcer becomes more inflamed or is very offensive, fill the ulcer with lint, apply a bandage and keep the sore wet with whiskey several hours, and then apply the paste. This will generally cure the worst cases of ulcers.

ULCERS UNDER A NAIL.

Ulcers sometimes form at the root of the nail, which may continue to prove a source of annoyance for months, or even years, unless the dead portion of the nail be removed. Sometimes it becomes necessary to remove the whole of the nail before the parts will heal soundly. If the root of the nail become separated from the surrounding parts by ulceration, or by an injury, the nail will operate as a foreign body, keeping up a continual irritation and ulceration of the parts until it is removed.

CHAPTER XX.

SECTION I.

VENEREAL DISEASE.

The term venereal disease is applied to two forms of disease differing essentially in their general aspect. The one, in the male consisting of an inflammation in the urethra attended by a discharge of thick matter; whilst the other is an ulcer called chancre situated externally to the urethra.

GONORRHŒA.

Symptoms.—The first symptoms are a burning sensation on passing water, accompanied with inflammation and a discharge of thick matter from the urethra. In the course of a few days the burning sensation on passing urine, subsides, but the inflammation and discharge of matter seldom disappear under eight or ten days, and very frequently continue many months.

In the *female* the symptoms are much more obscure, and so closely resemble diseases arising from other causes than venereal poison, that in many instances it is difficult to form an opinion as to the true character of the disease without having a history of the case, and even then an erroneous opinion might be formed by experienced physicians.

It should also be borne in mind that men are liable to disease of the urethra resembling gonorrhœa in many particulars, but arising from causes wholly distinct from that of gonorrhœal poison. The peace of families has in some instances been destroyed, by a wife or husband being affected with symptoms resembling those attending the venereal disease, at the same time the accused party being entirely innocent. Instances have occurred in which symptoms of gonorrhœa have occurred in men, in consequence of the wife being affected with a severe form of fluor albus, or whites, each party accusing the other of infidelity.

Of the general course of the disease in the male.—Under proper treatment and with great care and attention on the part of the patient in relation to diet, rest, &c., the disease will in many instances disappear in the course of a week or two, or even in less than a week. It often happens, however, that the disease is neglected in its first stage, the patient being unwilling to make his disease known; or he will not lie by without some plausible excuse for so doing, in order to evade suspicion, by which course the disease is often aggravated and becomes protracted to many months' duration.

Where the general health is much disordered, and the patient of a scrofulous constitution, want of proper care and treatment, the use of improper remedies, or when the venereal poison has been of the more malignant character, the disease is very liable to become extremely harassing and painful. The inflammatory action in the urethra failing to overcome the disease, either from the debility of the parts, neglect, or from improper treatment, then it generally happens that lymph is thrown out in the parts along the course of the urethra forming a hard cord, and when erections occur, as they often do during sleep, from the determination of blood to the parts, it occasions what is termed chordee, which is so extremely painful that the patient is induced to jump out of bed and apply cold water to the parts, and this in many instances has to be repeated many times during the night.

These erections are not only extremely annoying to the patient, but they aggravate the symptoms, and cause the disease to become more protracted in its duration.

Where the disease has been of long continuance, the patient is in most instances left with what is termed gleet, consisting of a slight discharge from the urethra of a transparent mucus, resembling the white of an egg, which is the effect of a weakened condition of the mucous membrane.

In the female the disease is much less troublesome; in many instances causing little inconvenience, and is also much more readily cured.

Treatment.—In the first stage of gonorrhœa, and more especially if there be much inflammation in the urethra, the patient should avoid using much exercise. His diet should be restricted to the lightest kinds of food, such as gruels, stale bread, toast and tea, &c. A gruel made of elm or of unbolted wheat flour are well suited to the early stage of gonorrhœa. The digestive powers are in general more or less weakened during the early stage of the disease, and if food be taken that is hard of digestion, it will retard the cure. And again, if strong food, such as butter and meat be used, the urine will be more acrid and irritating to the inflamed urethra.

When the general health is in a bad condition, or the patient feverish, or the skin dry and harsh, a course of medicine will be particularly serviceable; after which, the patient should take every hour or two a small dose of lobelia, either in the form of tincture, powder, or in pills; drink freely of elm gruel, flax-seed tea, barley or gum Arabic water; and morning and evening take a teacupful of a strong decoction of sumac or bayberry. The teas should be taken warm, with the view to promote perspiration, which is of much importance in the early stage of the disease, provided the patient remain in the house.

If the bowels be costive they must be relieved by injections, composed of composition, bayberry, or pennyroyal tea, adding a teaspoonful of the tincture or powder of lobelia.

When it is impracticable to have a course of medicine, the compound lobelia pills may be used as a substitute for courses of medicine: from one to three pills may be taken every hour or two, and these continued during the whole course of the disease. These pills will be useful in all cases, and in the great majority of instances, if used freely, will supply the place of all other medicines, excepting demulcents, as gum Arabic and elm.

External Applications.—During the first period of the disease, and particularly if there be extreme soreness and high inflammation, the patient should keep as quiet as possible, wet cloths should be applied and kept wet with warm water, tincture of lobelia, or with alcohol, or whiskey and water. This, by preventing too great a collection of blood in the part, will relieve the symptoms, and may shorten the duration of the disease. In many instances, however, the patient, to avoid suspicion and to conceal his unfortunate condition, continues to pursue his usual avocation, without applying the proper remedies, the disorder becomes aggravated, and its duration very much lengthened.

In the early stage of the disease, the tincture or a tea of lobelia, or lobelia tea dropped into the urethra shortly after passing water, will facilitate the termination of the inflammation.

In a more advanced stage of the disease.—After the passing of urine ceases to cause burning sensations, then astringent and stimulating injections into the urethra will be useful; commencing with a simple tea of bayberry or sumac, adding a small portion of the tincture of lobelia. In a still later period of the disease the discharge having been for some time profuse, a portion of No. 6 or pepper must be added to the tea in sufficient quantity to make a sensible impression on the urethra. I have known undiluted No. 6 to be used in some chronic cases for injections.

Balsam Copaiva.—This article is much used for the cure of go-

norrhœa, and when the balsam is pure and taken at a proper time, it is a valuable remedy. It should not be used in the first stage of the disease, nor until the inflammatory symptoms have abated.—Neither should it be employed if the patient be feverish, the skin being hot and dry, the tongue coated, redder than natural, and inclined to dryness. Under these circumstances the balsam is almost sure to disagree with the stomach. In general this medicine may be used to advantage in the course of ten days or two weeks from the commencement of the disease. If the symptoms do not improve under its use in the course of a few days, it should be laid aside for the time. The dose and methods of preparing may be seen in the *materia medica* under the head of balsam copaiva.

Chordee, as it is termed, depends upon the deposition or extravasation of lymph in the parts along the course of the urethra, which feels hard like a cord. This condition of the parts occasions severe pain at times, more especially at night, compelling the patient to apply cold water to the parts to ease the pain. The local treatment for chordee consists in the use of fomentations and poultices. In the commencement of chordee, its further progress may often be checked by steaming the parts an hour or two, by placing a hot brick in a basin containing a small portion of water, and sitting over the steam, or wrap a hot brick in damp cloths, and place it as near the parts as can be borne, in bed. A poultice composed of elm, white pond lilly, and green lobelia, should be kept on the parts during the night and through the day, applying salve spread upon oiled silk. The poultice should also be spread upon oiled silk to prevent evaporation.

When the patient is about his usual avocation, the compound lobelia pills may be taken three or four times a day. Camphor appears to have a beneficial influence in checking the symptoms of chordee. A piece of gum camphor the size of a large pea to be taken at bedtime, together with three or four lobelia pills.

After the symptoms of chordee have subsided, which in some instances will be in a few days, and in others several weeks, the poulticing may be omitted: still some kind of salve should be used in the way above described.

GLEET.

Where the disease has continued several months, but unattended with chordee, the parts being in general colder than natural, then injections must be employed frequently, with a view to excite healthy action in the debilitated vessels of the mucous membrane of the urethra. Equal portions of bayberry and poplar bark tincture, form a suitable injection in cases of long standing gonorrhœa, or in gleet.

In *females* this disease is to be treated upon the general plan already described, except that the injections are to be administered

to the vagina instead of the urethra. In females where the disease has continued several weeks, a sponge wet with bayberry or sumac tea and No. 6, should be introduced into the vagina, allowing it to remain two or three hours, and then changed for another prepared in a similar way, and in this way continue these applications several days together, unless they be found to disagree.

SYPHILITIC SORE, OR CHANCRE.

This species of the venereal disease differs materially from the one just treated of. It usually commences with the formation of a pimple, surrounded by inflammation. As the disease progresses, an open sore or ulcer is formed, termed chancre. When the chancre is seated upon the skin and does not advance more deeply, it may in general be cured without much difficulty; but when it is situated on the glans penis, it is more difficult of cure, or at least it requires a longer time for a cure to be effected. In individuals of depraved and filthy habits, and under other unfavourable circumstances, as where mercury is given, the syphilitic sore sometimes assumes a highly malignant character, occasioning extensive sloughing of the parts. The poison may likewise become absorbed and carried into the system, occasioning what are called the secondary symptoms of syphilis. A swelling in the groin termed bubo, is a very common attendant upon chancre.

Treatment.—An important point to be kept in view in treating syphilis, is to prevent it from extending to the system. For this purpose no plan of treatment probably can be adopted with so much certainty of success as a course of medicine given every day or every few days in the commencement of the disease; and during the interval between the courses, to place the system under the influence of lobelia, taken in small doses; together with the use of composition and injections to regulate the bowels.

A course of medicine will not be necessarily required in every case of this disease, still its operation will prove beneficial in all cases, and in all stages of the complaint, and when the disease has a malignant character, it must not be omitted.

When the patient refuses to have courses of medicine administered, the compound lobelia pills should be used freely. The free use of these pills will in most cases be sufficient in the way of constitutional treatment.

A teaspoonful of composition powder taken in a little lukewarm water, and repeated four or five times a day, is a good remedy in all cases, and when the lobelia pills cannot be obtained, add a portion of lobelia powder or tincture to the composition.

Local Treatment.—The sore in the commencement should be

poulticed with a compound of elm, white pond lily, and lobelia powder, wet with the tincture of lobelia, and spread upon oiled silk, bladder, or something that will prevent the poultice from drying rapidly; or if the sore be so situated that a poultice cannot be applied to it, it should be wet with the tincture of lobelia several times a day.

When an open sore or ulcer is formed, the poulticing should be continued, wetting the ulcer two or three times a day with No. 6, or with the liquid of the third preparation of lobelia.

Chancre is seldom cured under two or three, and very often it continues for six weeks.

Patients very naturally become dissatisfied with the treatment, and are induced, unless they discover a manifest improvement in the condition of the sore, to make a change, under the erroneous idea that they may find a remedy that will eradicate the disease in a few days. Dishonest and ignorant empirics who advertise to make a speedy cure in all cases, are applied to, but failing to cure, others are applied to, and thus by frequently changing the treatment, the disease becomes aggravated and protracted much beyond what it would have been if it had been left entirely in the hands of nature. A man who advertises to cure the venereal disease in a short time, and without fail, may be set down at once as one who depending upon the credulity of others for support, has sacrificed honesty and truth for motives of gain. The reason why the failures of these empirics are not more generally known, may be readily seen. No one who has the venereal disease will expose *himself* in order to expose those who have deceived him and fleeced him of his money.

The medical profession, though more honourable in general than the class above alluded to, have not as yet settled upon any general plan of treating syphilis. The opinion of the *great guns* of the profession concerning the effects of mercury in this disease, have been, and still are extremely various. Formerly it was believed that mercury was a specific for syphilis, not because it proved to be a specific, but because high authority had pronounced it *to be* such. More recently, however, this doctrine has been exploded by the highest authority in the profession, and the use of mercury is not only declared unnecessary in the cure of syphilis, but pernicious in the extreme, unless given with the greatest caution. Professor Gibson, of this city, in his work on surgery, recommends the use of mercury in cases of chancre, but he now honestly declares mercury to be altogether improper, tending to convert a simple chancre into one of a malignant or corroding character. P. Ricord, surgeon to the Venereal Hospital of Paris, in a recent "*Treatise on Venereal Disorders*," in the course of his observations on the employment of mercury in chancre, observes: "By one party it is declared, that no cure can take place, no repose be

enjoyed, no future health anticipated unless mercury be used, and by the other, future disease and death are predicted if this remedy be employed." "Again," observes the same writer, "Prejudice attaches us to the principles in which we are educated, and renders them objects of affection; and hence the obstinacy with which men cling to ideas with which they are familiar. The experience of the world has shown that partisans are sternly adhesive; that truth is more frequently imagined than perceived; that the value of a reason is too seldom accurately measured; and that minds satisfied with partial knowledge, far out-number the warm conscientious lovers of philosophy. We can readily perceive the reason why men spurned the great principle promulgated by Rose and Thomson. It was a heavy blow aimed at a favourite and long cherished opinion; but the truth will stand fast, despite the efforts of the boisterous declaimer, or the insidious endeavours of the smiling sophist. Rose and Thomson demonstrated an important truth; they incontrovertibly proved that mercury is not necessary to the cure of chancre as chancre; and this the intelligent ingenious mind will acknowledge, however much it may dissent from their method of applying it."

When the ulcer has been discharging freely for some time, the sore should be filled every day with bayberry, marsh rosemary, or alum root, finely pulverized, put in dry, and the whole covered with salve spread upon oiled silk.

The ulcer is sometimes so situated that it cannot be reached except by injections; for instance, when its seat is on a part where the skin is drawn over, and swollen to such a degree that it cannot be drawn back. Under circumstances of this kind, local steaming and warm fomentations must be employed, and the sore syringed often with lobelia tea, or tincture of lobelia; and if there be a free discharge of matter, bayberry tea must be employed, adding tincture of lobelia and No. 6.

Whenever a syphilitic ulcer is extending, it is necessary to apply active stimulants, as No. 6 and the third preparation of lobelia, with the view to excite adhesive inflammation in the cellular tissue, to prevent the further extension of the ulceration.

When a chancre discharges matter freely, the dressing must be changed frequently, and every precaution used to prevent other parts from being inoculated with the poison; whereas, when the sore is in a healing condition, the dressing should not be removed oftener than twice in twenty-four hours. A good plan of dressing a healing sore is to cover the edges of the ulcer with salve; and to apply lint to the centre of the ulcer, the sore then may be dressed without disturbing the healing process going on at the edges.

The practice of destroying the syphilitic pimple or ulcer as soon as it appears, or within the first few days, by applying lunar caustic, is strongly advocated in a "Practical Treatise on Venereal Disor-

ders," by Philippe Ricord, M. D., surgeon to the Venereal Hospital of Paris. In the case of a pimple, this writer recommends that it be cut open, and then apply the caustic, which should be pointed, when the sore is small, so that the bottom of it may be effectually cauterized.

Ricord states that if this treatment be applied early, a chancre may usually be cured in eight or ten days, when it would require several weeks if left alone to run its course. If this declaration can be substantiated by experiment, the practice should certainly be adopted. It generally happens, however, that a physician is not applied to in this disease until the lapse of several days or even weeks after its first appearance.

It must be recollected, that the lunar caustic is not to be applied later than the fourth or fifth day from the first appearance of the syphilitic pimple. After the application of the caustic, the part must be covered with some simple salve, and the sore wet occasionally with tincture of myrrh, or No. 6.

BUBO.—SWELLING IN THE GROIN.

Both gonorrhœa and syphilis are apt to occasion a swelling in the groin, termed bubo. When a bubo is occasioned by gonorrhœa, it very rarely suppurates; but when it arises from the absorption of syphilitic virus, suppuration is apt to take place.

Treatment.—Warm fomentations, volatile liniments, or lotions, and protecting the parts from cold, are all that will be required in the local treatment of bubo attending gonorrhœa.

When bubo occurs in one who has a syphilitic ulcer, the patient should keep in bed, and cotton wadding or soft muslin cloths wet with the tincture of lobelia applied to the parts, and retained by having a bandage placed around the hips, and another passing under the thigh, over the groin, and fastened to the hip bandage.

The patient should also be placed under constitutional treatment. A full course of medicine is the most efficient method of treatment that can be devised—it is suited to all cases, and to all stages; it harmonizes with nature and aids her efforts to work off disease. The courses of medicine are to be repeated as the exigencies of the case demand. In the milder cases, unattended with much swelling or pain in the groin, and where the general health is not prominently disordered, a course of medicine may not be demanded; here the patient should keep warm in bed, take the compound lobelia pills to the amount of from ten to fifteen pills every day; regulate the bowels by injections; and take a dose of composition, or of bayberry and pepper two or three times a day.

When the swelling in the groin is very painful and throbbing, poultices must be applied with a view of favouring suppuration.

The poultice so often mentioned, consisting of elm, ginger, white pond lily and cracker, may be employed, until the bubo is opened or breaks spontaneously, when a more stimulating and astringent poultice must be employed, such as equal portions of composition and slippery elm; or to the first mentioned compound, add a portion of capsicum and bayberry, the poultice being spread upon oiled silk to prevent evaporation. If the parts do not heal readily, the cavity of the bubo should be syringed every morning and evening with bayberry or No. 3 tea, adding a portion of No. 6. When the swelling has subsided, and the parts become relaxed, lint wet with tincture of myrrh, may be introduced into the cavity of the abscess, and some kind of plaster applied to exclude the air from the parts.

SECONDARY SYMPTOMS OF SYPHILIS.

From the want of proper treatment of chancre, and more especially where the patient has been subjected to a mercurial course of treatment for the disease, the syphilitic poison may be absorbed and carried into the blood, and finally become seated either in the mouth, throat, nose, bones, or upon the surface of the skin.

When the disease attacks the roof of the mouth, an ulcer is formed, and if it be not checked, the bone is made bare and exfoliates, forming an opening between the mouth and the cavity of the nose, and changing the sound of the voice.

If the disease be seated in the tonsil, an ulcer is formed, presenting the character of chancre. When the mucous membrane of the nose becomes diseased by the syphilitic poison, the patient is very liable to lose some portion of the bones of the nose.

Sometimes the *secondary* symptoms of syphilis appear in the form of copper-coloured eruptions on the skin. These eruptions are slightly raised, scarcely ever painful, but are apt to itch, especially in the after part of the day.

"There is a greater variety of character in these venereal eruptions than in any other symptoms of the complaint; not only in appearance but also in size. In some you will find the eruptions of considerable magnitude, appearing as if a portion of copper-coloured skin laid upon the surface, but unattended with ulceration. In others you will observe deep ulcerations with a ragged edge; in a third, there will be scaly eruptions, covering very large surfaces in various parts of the body." Syphilitic eruptions are generally readily cured.

When the disease attacks the periosteum of the bones, "the patient experiences in the evening a sensation of pain in the bone which afterwards becomes the seat of the *node*. The pain does not immediately produce a swelling; but in the course of a few days a painful swelling appears in the evening, which disap-

pears again on the following morning, and leaves no pain. At this time the periosteum (membrane that covers the bone) only becomes affected with inflammation; in a short time a deposit takes place between it and the surface of the bone; this deposit is, in the first instance, only a serous fluid, but a cartilaginous substance is soon secreted, which is gradually converted into bone, and is technically called a *node.*

Treatment of the secondary symptoms of Syphilis.—Whatever part may be the seat of the disease, the same general constitutional treatment will be demanded in each case. The vapour bath, an occasional course of medicine, together with the use of spice bitters, composition, Dr. Logan's alterative syrup, sarsaparilla syrup, and compound lobelia pills are the means and remedies chiefly to be employed.

When an ulcer is formed on the roof of the mouth, it should be wet frequently with the tincture of myrrh. Where the bone has exfoliated and formed an opening into the cavity of the nose the opening may be filled with cotton or a plate worn over it by which fluids will be prevented from passing into the nose, and the voice will be natural. The chief reliance for the cure is in constitutional treatment.

In ulcer of the throat, the tincture of myrrh, No. 6, a strong decoction of sumac leaves and berries, and tincture of lobelia, may be employed as gargles. Breathing the steam from hot water, a portion of lobelia being thrown in the water occasionally, will prove beneficial when the disease attacks the mouth, throat, or nose.

Where the nose is diseased, the patient should frequently resort to the breathing of steam through the nostrils, and the parts should be syringed occasionally with bayberry or sumac tea, adding a portion of No. 6, or the simple tincture of myrrh.

Syphilitic eruptions are in general very readily cured by the use of the vapour bath, a course or two of medicine, bathing the eruptions with a preparation made by adding sumac berries to No. 6, or with the third preparation of lobelia, and then apply the stimulating ointment, or some kind of salve to protect the parts from the air; this last is more particularly needed in case of ulceration.

Where the periosteum of the bone becomes diseased, and there is evidence of the existence of fluid between the periosteum and the bone, attended with throbbing pain and a blush upon the skin, it should be opened and the part poulticed until the swelling and inflammation subside, when a strengthening plaster must be applied, and if the parts be slow in healing, syringe the cavity with tincture of myrrh.

In many cases the swelling will fluctuate, proving the existence

of a fluid, but unaccompanied with pain, and without inflammation or a blush of red upon the skin; here it will be improper to make an opening into the swelling, but steam the limb daily, apply stimulating embrocations, keep the parts warm and bandaged, and employ constitutional remedies.

CHAPTER XXI.

SECTION I.

OBSTRUCTED MENSTRUATION.

Derangement in the function of menstruation may be occasioned by a variety of causes, the most prominent of which is exposure to cold and wet during the menstrual period, or immediately preceding the time of its occurrence.

This function may be either partially or completely suspended. Some females during this period, experience pain almost as severe as labour pains, and which continue in some instances several days, in others only a few hours.

When menstruation does not come on at the period of life at which it usually does, it is termed suppressed menstruation.—The symptoms usually attending the complaint, and the treatment indicated will be found under the head of chlorosis or green sickness.

An excessive flow of the menses depends upon constitutional debility or disordered condition of the system, and the same course of treatment that regulates this secretion when too profuse, may be found equally applicable when this function is partially or wholly obstructed.

Various derangements of the system are observed to follow as a consequence of obstructed menstruation, such as violent pain in the head, bleeding from the nose, violent fever, delirium, bleeding from the lungs, violent pain in the side, back or loins, and sometimes convulsions. The uterus is liable to have its internal surface coated with a false membrane obstructing the menstrual secretion.

Treatment.—Whether the obstruction be partial or complete the case will require to be treated upon the same general principles.

When the patient is dyspeptic, and the general health much impaired, the indications of treatment are, to restore the natural warmth of the body, to excite and sustain the capillary circulation, to correct the disordered condition of the stomach and bowels, and to strengthen the nervous energy which governs this and every other function of the body. The remedies and means to be employed to fulfil these important indications are, pure stimulants; the vapour bath, emetics, anti-canker medicine, and injections to the bowels. These remedies to be applied according to the circumstance of the case; when the symptoms are violent, the remedies must be applied more liberally, than in slight derangements.

There are no other means so effectual in restoring the function of menstruation as regular courses of medicine; and the free use of injections to the bowels, containing stimulants and lobelia. Half a pint of strong pennyroyal tea adding a teaspoonful of No. 6 and as much green lobelia; or of bayberry or sumac tea, adding a teaspoonful of the third preparation of lobelia; or composition tea adding a teaspoonful of green lobelia, may be employed.

The Thomsonian course of medicine is well adapted to the cure of every derangement of the menstrual function occasioned by cold or other constitutional derangement. The same treatment will be proper where there is obstruction as where there is an excess of the catamenia.

In some instances it is only necessary to soak the feet two or three times a day, to use a few injections, drink freely of warm pennyroyal tea, and keep covered warmly in bed, with a warm brick placed at the feet.

In other instances the case will demand the frequent repetition of a course of medicine, together with the frequently repeated use of the other means already mentioned, more particularly the injections. The functions of the kidneys, bladder and uterus, may be more immediately and effectually influenced by means of injections than by medicine taken into the stomach.

When the derangement has become seated, and depends upon constitutional debility, the patient should seek the fresh air, use moderate exercise, sponge the body with cold salt water in the morning, repeating it twice or three times a week, apply friction to the surface with a flesh brush or salted towel, and take such medicine as the circumstances of the case may demand, observing especial care to keep the feet dry.

The use of tonics are indicated when the derangement has been of long standing and the patient weak and relaxed. The ladies' spice bitters which contain a portion of gum myrrh and unicorn root, may be employed as a general tonic and stimulant in such cases. Tincture of guiacum is a good tonic in such cases.

In nine cases out of every ten of the cases of obstructed menstruation, the derangement is occasioned by exposure of the feet

to cold and dampness. Standing upon a damp pavement or upon wet ground, in thin soled shoes, is very apt to occasion obstructions in the system, not always to be removed without considerable difficulty.

When convulsions come on, the treatment must be thorough, depending chiefly upon the use of the third preparation of lobelia; or if the patient have been in good health a short time previously to the fits, and the circulation is active, the face red and swollen, the brown lobelia powder may be given in lukewarm water, in teaspoonful doses and these repeated frequently until the symptoms abate, or the spasms disappear, there is no objection to the use of the third preparation of lobelia in any case, the lobelia powder being more easily taken would of course be preferred where it will do as well. Injections should always be employed if practicable in cases of convulsions arising from obstructed menstruation.

SECTION II.

TREATMENT OF FLUOR ALBUS, OR WHITES.

When this complaint is attended by general debility, which is its most common cause, a permanent cure cannot be anticipated without an improvement in the general health. To effect this a course or two of medicine will be required in most instances, to cleanse the stomach and bowels; after which the ladies' spice bitters, or some other form of bitters should be taken before meals; and a teacup two-thirds full of bayberry or sumac tea, adding a teaspoonful of composition powder, or half a teaspoonful of cayenne pepper to the tea every night or morning to keep the stomach from becoming foul. This dose will sometimes vomit but never unless the stomach be disordered, and then it will always be beneficial. Half a pint of a strong decoction of equal portions of sumac or witch hazel leaves, and poplar bark administered by injection to the bowels every night at bed-time and retained until morning will not only improve the condition of the bowels, but it will also strengthen the uterine organs. Injections with a female syringe must also be employed. In the early stage of the complaint, or when the parts are irritable, a simple decoction of bayberry, cranesbill, witch hazel or sumac, may be employed; the decoction to be made very strong, in order to have the desired effect. An ounce

of bayberry tea to a pint of boiling water, will form a decoction of the proper strength. Where the sensibility of the parts is blunted, stimulants, as No. 6, or cayenne must be added to the anti-canker tea, in quantity sufficient to be felt very sensibly; the injection to be repeated several times a day.

Sponging the body with salt water in the morning, friction to the surface, wholesome and nourishing diet, are important means to improve the general strength.

CHAPTER XXII.

MISCELLANEOUS.

BEE-STINGS.

When a person is stung by a honey bee, wasp, hornet, yellow-jacket, or humble bee, a severe pain is felt in the part, soon followed by inflammation, and swelling. It is the poison injected into the wound that causes the pain and inflammation. The design of the inflammation is to block up the cellular tissue, and prevent the poison from spreading. Hence inflammation is necessary, to secure the system from injury by the poison. The inflammation, however, may extend much further than is necessary for accomplishing the object for which it is instituted, namely: to protect the parts surrounding the wound from the effects of the poison, and prevent its absorption into the system. All that is necessary in these cases, in general, is to apply to the parts tincture of lobelia, salt and vinegar, or spirits of hartshorn, by means of cotton, or soft cloths, kept wet with some one of the above articles.

If, after the above treatment, the parts continue to swell very much, and look somewhat like a dropsical swelling, the patient should be steamed, and have an emetic administered.

NERVOUSNESS.—WEAK NERVES.

This question is often put to physicians. What shall I do to strengthen my nerves? It is not at all times that the proper remedy can be pointed out, without some inquiry into the patient's habits, occupation, &c. Thus one of a nervous temperament may, by the free use of tobacco, either by chewing, smoking, or snuffing, become extremely nervous from its effects. Whilst one will use tobacco freely, without apparently weakening his nervous system, another will have his nerves very much weakened by using it even in moderation.

The use of any of the narcotic poisons, debilitates the nervous system. Hence opium eaters are apt to have their nervous system shattered, and consequently they suffer extreme depression of mind, except when the brain is under the immediate influence of the narcotic, which produces a kind of hallucination of mind, bordering, sometimes, upon mania. There are medicines so poisonous, that, administered in the most minute doses, will often do irreparable injury to the nervous system. The intemperate use of strong drink also weakens the nerves, occasioning tremulous motions of the hands, and sometimes of the whole muscular system. Depressing passions, venereal excesses, too close application to study, more especially in confined and unwholesome air; dyspepsia, and, in fine, whatever weakens the system generally, will weaken the nerves; and in persons of nervous temperament, a disordered state of the nerves frequently forms a most prominent symptom, and then the patient is said to be nervous. Attending in a family not long since, a female in middle life inquired of me if we had not a medicine that would strengthen the nerves. I perceived that her nerves were extremely weak, and having ascertained that she was a great smoker, I told her what I believed to be the chief cause of the nervous weakness, which, it appeared, had never occurred to her as having such a tendency. Protracted illness, more especially when poisonous drugs are used as medicine, is apt to leave the nervous system in a weak condition, sometimes continuing for many years.

Treatment.—The same means that will restore the general health and strengthen digestion, will strengthen the nervous system. If the nerves are weak in consequence of a disordered condition of the stomach, the original cause must be removed before the nerves can be strengthened.

The use of the cold shower bath, or sponging the body every morning with cold salt water; frictions to the surface with the

flesh brush, salted towel, or horse-hair mitts, together with exercise in the open air, are important means for invigorating the nervous system.

Nervines.—Cypripedium humlie, (Thomson's nerve powder) scutilaria latrifolia (scull cap) are chiefly employed as nervines in the Thomsonian practice. These may be used on many occasions with much benefit as a means of promoting sleep and of quieting nervous agitation. A collection of acid in the stomach frequently occasions wakefulness, and an excited condition of the nervous system, in which case a dose of sal æratus, or bi-carbonate of soda, in lukewarm water is a good remedy.

Lobelia, though not a narcotic, exerts a marked influence in calming nervous excitement. There is no remedy of equal value in quieting fretfulness and wakefulness in infants and children, as the tincture of lobelia, given in small doses. Although it may not produce sleep with as much certainty as laudanum, or some other preparation of opium, yet the fact of lobelia being free from any deleterious quality, gives it the preference to narcotics.

POLYPUS OF THE NOSE.

Polypus of the nose is seldom observed in others than those of scrofulous constitution. It is generally brought on in consequence of repeated catarrh or cold.

During the first stage of catarrh, the mucous membrane of the nose becomes dry, then a free secretion of thin fluid is produced, terminating finally in a thick pus-like secretion. This is the natural course of catarrh as it passes to a favourable termination. Whereas, in scrofulous constitutions the mucous membrane when diseased by repeated colds, may be too far debilitated to establish that kind of inflammatory action necessary to the formation of those salutary secretions above mentioned, and instead of their being a thick yellowish secretion, which terminates the disease, leaving the parts in a natural condition, a tough, semi-transparent substance is formed on some portion of the lining membrane of the nostril, which adheres to the parts and increases in size, until in some instances it fills one side of the nostril, and frequently becomes extended down the posterior naries, so as to be seen and felt in the throat, behind the palate. Polypus is composed of albumen, and in time becomes in some degree organized, blood vessels being shot through it from the mucous membrane.

A substance similar to polypus of the nose is sometimes formed on the uvula of the palate, resembling the soft part of an oyster,

arising from the same cause, though not so generally confined to those of scrofulous constitutions as the former disorder.

Treatment.—Polypus of the nose in its early stage may in many instances be dispersed by black pepper, composition powder or finely pulverized blood-root snuffled freely up the nostril. If the polypus be so large as to obstruct the passage of air through the nostril, the powder should be blown upon the polypus through a quill.

Constitutional Treatment.—When the general health is much deranged, constitutional treatment must be instituted to restore a more healthy action in the mucous membrane.

When the uvula becomes affected in the manner above described, having the appearance of the soft part of an oyster, or of a blister, gargling the throat frequently with a mixture of black pepper and whiskey, pepper sauce, or strong bayberry or sumac tea and pepper, will in general effect a cure in the course of a few days.

Polypus of the nose cannot in every instance be removed by the means above mentioned, as in many cases nothing short of a surgical operation will effect its removal.

CRAMP IN THE LEGS AND FEET.

Cramp in the feet and calves of the legs, may in numerous instances be prevented by the patient rubbing the feet and legs up to the knees with the stimulating liniment, and wearing woollen or worsted stockings at night. A bottle of hot water or a hot brick placed at the feet on going to bed, will also prove a preventive to cramp.

Most persons who are attacked with cramp at night, are forced to jump out of bed before the muscular spasm can be overcome.

PROLAPSUS ANI—PROTRUSION OF THE BOWEL.

In this complaint a portion of the intestines protrudes from the anus.

Causes.—Constitutional weakness of the parts: the use of purgative medicine, especially aloes; and the violent straining at stool, are the principal causes of the complaint.

Treatment.—The first point to be attended to when prolapsus

takes place, is to return the protruded intestine. This is generally easily accomplished early after the protrusion of the bowel takes place, by simply pressing upon the parts. In some cases it is best to introduce the finger, previously oiled, into the intestine, and pressing gently upon the parts until the bowel is returned into its proper place.

If the parts become much swollen and inflamed, fomentations should be employed by causing the patient to sit over a vessel containing boiling water, or vinegar and water; or a warm poultice applied, composed of lobelia powder and elm, and the patient nauseated with small portions of lobelia, before any attempt is to be made at returning the intestine. If vomiting should occur from the small doses of lobelia, pressure must be made upon the protruded bowel at the time.

The means to be employed for strengthening the bowel are, injections of a strong decoction of sumac or witch hazle leaves, and retained in the bowels several hours, and this repeated daily. An injection of the kind above mentioned, administered at bed-time, may in general be retained until morning.

In many cases the intestine does not protrude except when the bowels are moved. If the prolapsus be liable to occur at other times, a tight bandage or a truss made expressly for this complaint must be worn until the parts become strengthened.

If the general health be deranged, constitutional treatment will be required. Washing the body in cold salt water in the morning will prove beneficial in invigorating the system.

"In infants a fresh protrusion of the rectum may sometimes be prevented by making them set on a high close stool, with their feet hanging freely down. Every thing tending to produce either diarrhœa or costiveness should be avoided."—*Castles' Manual of Surgery.*

HERNIA, OR RUPTURE.

Hernia in the great majority of instances commences about the groin, forming at first a small tumour, but, if neglected, the protruded intestine is apt to descend gradually along the course of the spermatic chord, and sometimes forms a large tumour in the scrotum.

Causes.—The usual exciting causes of hernia are violent sneezing, heavy lifting, and hard straining.

In most instances the protruded intestine forming the tumour, is readily returned into the cavity of the abdomen by slight pressure upon it. This is called *reducible* hernia.

In some cases *adhesions* take place, preventing the return of the tumour into the abdomen, forming *irreducible* hernia.

Occasionally the protruded intestine becomes strangulated in consequence of a stricture at the upper part, or neck of the tumour, constituting a most formidable and dangerous form of disease. From estimates that have been made, it would appear that one of every ten or twelve of the individuals in the community, are effected with hernia, or rupture, and still *strangulated* hernia is of rare occurrence. The strangulation may be either partial or complete; and a patient may experience severe pain in the part without there being any stricture. It is asserted by experienced surgeons that strangulation is most liable to occur where the hernia is very small.

Treatment.—In the treatment of reducible hernia, the first point is to return the protruded intestine into the cavity of the abdomen, and then apply an appropriate truss. By attending to the rupture when first discovered, and applying a truss, a permanent cure will in many instances be effected. The truss must be worn constantly except when the person is in bed, and always be put on again before rising from it. During an effort to laugh or sneeze, the hand should be pressed against the parts, unless supported by a truss.

Of the various kinds of trusses introduced into use, there are probably none superior to Dr. Chase's, of Philadelphia.

In *simple irreducible* hernia, the tumour should be supported by a bag, to prevent its further enlargement.

STRANGULATED HERNIA.

When hernia becomes *strangulated*, violent pain is experienced in the part and throughout the belly, attended with sickness and vomiting, and more or less fever. "If the stricture continue without being relieved, the most distressing symptoms ensue. The patient continues to retch and vomit, and the contents of the bowels down to the stricture are sometimes thrown up; the extremities are cold; the pulse small, quick and hard." "After a time hiccough comes on, the pulse is hardly perceptible, respiration weak, and the whole body covered with a cold clammy sweat. Mortification now takes place, beginning in the protruded viscera and extending to the neighbouring parts. The patient suddenly becomes easy, the swelling of the belly subsides, and the tumour of the part diminishes, and the skin covering it sometimes changes its natural colour for a livid hue." By pressing the tumour with the fingers, a crackling or crepitus will be perceived, as though bubbles of air were bursting under the pressure of the fingers.

"This crepitus is the sure indication of gangrenous mischief within. In this state it goes up spontaneously, or is returned with the smallest degree of pressure; a discharge is made by stool, and the patient fancies himself better. This feeling, however, is of short duration, hiccough and cold sweats increase, convulsive symptoms come on and the patient soon expires." It will be perceived that the symptoms attending mortification, may be mistaken for a favourable crisis. The cold sweats, hiccough, and unnatural expression of countenance, continuing after the pain is gone, are always to be considered alarming.

Treatment of Strangulated Hernia.—The use of the vapour or warm water bath, and relaxing the system fully by giving the patient freely of lobelia, and administering it also by injection and retained, constitutes the treatment most likely to overcome the stricture.

After the patient has been in a vapour or warm water bath, he should be wrapped in a blanket, and kept warm in bed provided perspiration continue. If the skin become dry and the patient be oppressed with heat, the surface may be bathed with spirits or vinegar.

The most important means for the cure of strangulated hernia is the use of lobelia injections. They may be prepared by adding lobelia powder to simple warm water. The brown lobelia is to be preferred, a teaspoonful or even a tablespoonful of which may be administered at a time and retained. When the system becomes relaxed, an attempt should be made to return the protruded gut into the cavity of the abdomen, not by simple pressure upon the tumour, but by placing a hand at each side of the tumour, and as gentle pressure is made by the palms of the hands, the tumour should be drawn backwards, by which the contents of the intestine will be more likely to return into the cavity of the abdomen. Another method is to grasp the tumour with one hand, making moderate pressure, and with the finger of the other hand, endeavour to push small portions of the intestine through the stricture. This should not be attempted, however, until the system has become more or less relaxed by the use of lobelia given freely, and administered by injections; together with the application of the steam or warm water bath.

In severe cases, it will be proper to give from a teaspoonful to a tablespoonful of the third preparation of lobelia, in bayberry tea, every 15 or 20 minutes, and give injections of brown lobelia in warm water as often as every hour. The third preparation will be necessary to be given to support the power of the internal nervous energy, as well as to answer other important indications.

A patient who has a strangulated hernia should keep the body bent forwards, and the knees drawn towards the belly. The po-

sition generally to be preferred, is on the back with the hips and shoulders raised, and the thighs drawn up.

When the above treatment fails of removing the stricture, after being perseveringly employed, the last resort is an operation. This, however, will require a surgeon. Although few recover after an operation, still it may save life in some cases. The operation itself is not severe, nor dangerous, but it is rarely performed until mortification is about to take place.

COURSE OF MEDICINE.

The following process constitutes a Thomsonian course of medicine.

1st. A steam or vapour bath. The patient taking during this operation a dose of composition or pepper tea.

2d. An emetic, prepared and administered according to the directions hereafter given.

3d. An injection to operate upon the bowels. In most cases it is better to administer an injection at the commencement, before the vapour bath, and repeat it after the emetic operates.

4th. After the operation of the emetic, the vapour bath is again applied, to restore a natural warmth to the system, or as Dr. Thomson expresses it, "to set the wheels of life in proper action." When the patient has remained a sufficient length of time in the bath he must be showered with cold water, or sponged with whiskey or vinegar, and rubbed dry. I believe it may be safely asserted that there is no form of acute disease, that can be treated more successfully than by regular Thomsonian courses of medicine.

5th. Light nourishment is to be given after the emetic operates, either before or after the last bath, as the inclination of the patient may dictate. Milk porridge is generally given as nourishment after a course of medicine, and when the patient inclines to take it during the operation, it may be given, as it will assist the operation of the emetic. In sudden attacks of disease, however, as in fevers, pleurisy, &c., crust coffee, elm, gruel, barley water, or gum arabic water will be more suitable.

The above process, termed a course of medicine, first instituted by Samuel Thomson, is the most effectual, consistent and philosophical plan of treatment ever devised for the cure of disease. By courses of medicine, together with the usual intermediate treatment, disease may be cured that has resisted every other plan of treatment; and even though it fail of effecting a cure, still the treatment will not injure the constitution—the declarations of medical men to the contrary notwithstanding. The medical profession manifest a degree of prejudice against the Thomsonian practice that is wholly inexcusable. As guardians of the health and lives of the community, they should know better than to make the outlandish, false and absurd assertions which many of them do in relation to the Thomsonian practice.

GENERAL DIRECTIONS FOR ADMINISTERING A COURSE OF MEDICINE.

1st. *The Vapour Bath.*—Various methods are employed in the application of the vapour or steam bath; the usual plan, however, is to place the patient upon a tight bottomed chair, throwing a quilt over him, leaving the head uncovered; a flat bottomed basin or dripping pan is to be placed under the chair, a quart of hot water poured in, and put into it a red hot brick or stone. If the brick be entirely red hot, it should be set in sidewise at first, or the steam may be too warm for the patient to bear; in a few minutes the brick may be placed with the flat side down. Three and sometimes two bricks will be sufficient, provided they are thoroughly dry and red hot on one side. If the steam be too hot, the quilt may be raised from the floor so as to admit the cold air, and when the patient feels oppressed with the heat, the face and head must be frequently wet with vinegar and water, or whiskey, and occasionally the body of the patient should be washed or sponged with cold or tepid water. During the latter part, or at the close of the steaming, a shower bath must be used, or the patient washed in cold water or spirits.

The feet may be more effectually steamed by placing a stool upon the chair, the patient sitting upon the stool and resting the heels upon the edge of the seat of the chair.

A small tin boiler and pipe for conveying steam either into a steam closet, or under a chair, is more convenient than hot bricks, and the steam can be more easily regulated than when bricks are used.

Steaming in Bed.—When a patient is too weak to sit up, the steam may be applied under the bed-clothes by placing about the patient hot bricks or stones wrapped in damp cloths. Bricks that have been lying in a damp place should not be used, as they will not retain the heat.

Placing the patient on a quilt, and when the hot bricks are applied, throwing the sides of the quilt over the patient, will confine the heat and vapour to the patient, and also protect the bed-clothes from dampness.

When the bed-clothes have become damp from the steam or the brick cloths, hot bricks should be placed in the bed wrapped in *dry* cloths.

By having two sets of bricks, a regular steam and heat may be kept up any length of time.

Another way.—Make a frame work of hoops and plastering lath,

or narrow strips of boards; place it over the patient, throw a quilt over the frame work, and introduce the steam under the cover by means of a pipe and boiler; or by basins containing a little hot water and putting hot bricks in them. The patient to be stripped of all clothing whilst steaming.

Or, place together two rows of chairs, put on the seats a matrass, or quilts; throw a quilt or blanket on the backs of the chairs to prevent the steam escaping from the sides; and when the patient is put on this bed, spread a quilt across the top and close the openings at the head and foot. The steam pipe to be introduced at the foot. The patient's head to be placed on a pillow and remain uncovered. Patients who are extremely weak, will bear steaming in this way from half an hour to two hours, provided the body is bathed occasionally with vinegar and water, or tepid water.

The Emetic.—There are many modes of preparing an emetic. For ordinary cases the following will be found effectual.

A teaspoonful of the third preparation of lobelia:
A teaspoonful of green or brown lobelia:
A large teaspoonful of sugar:

Rub these well together in a teacup, and then pour on a teacup two-thirds full of strong bayberry or No. 3 tea, nearly scalding hot: stir it occasionally and take it lukewarm.

A similar dose is to be repeated in the course of twenty minutes or half an hour. It is seldom necessary to take more than two doses, still more may be given if required. I have on many occasions given two and three ounces of lobelia in administering a course of medicine.

When a sufficient quantity of lobelia has been given, the patient should be allowed to remain quiet, without taking any thing to force the operation until an hour or two has elapsed. In some instances, however, the patient will vomit soon after taking the emetic, but in very many cases the emetic will remain from two to four hours before it will operate, provided no means be taken to force its operation. It is better that the emetic remain on the stomach at least an hour, as it generally renders the operation more easy and effectual. There is no objection to patients' drinking freely if they desire it, when under the operation of a course of medicine, and when the emetic does not operate freely, composition, or cayenne should be given.

In all cases of seated disease, where the stomach is weak and the system relaxed, the emetic should be combined with the more active stimulants, such as the formula above mentioned, adding freely of No. 6, or pepper, to the emetic. In low cases of protract-

ed fevers there is no better form of emetic than the liquid of the third preparation of lobelia in strong bayberry or No. 3 tea.

Another Method of Preparing the Emetic.—Take a large heaping tablespoonful of bayberry or No. 3 powder and an even teaspoonful of cayenne, pour on half a pint of boiling water; and then add a teaspoonful of nerve powder; when it settles, pour or strain off the tea, and whilst moderately hot add four teaspoonsful of green or brown lobelia powder, and sweeten. This may be taken at once, or two or three times at intervals of fifteen or twenty minutes. The stronger the bayberry tea the more easily and effectually will the emetic operate.

Another Plan of Preparing the Emetic.—Take a teaspoonful of lobelia powder, half a teaspoonful of nerve powder, and two large teaspoonsful of No. 6. Pour on a teacup two-thirds full of strong bayberry or composition tea, sweeten and take warm.—The dose to be repeated three or four times at intervals of fifteen or twenty minutes.

And again, the lobelia powder may be mixed in strong composition tea, sweetened, and taken in the usual doses. This last is the way in which emetics are usually prepared for children.

After the emetic is given, the patient need not take much drink until the emetic operates. It is a practice with too many nurses to force the patient to drink a cup of medicine every few minutes during the operation of a course of medicine. It is much better to allow the emetic to remain on the stomach as long as it will, or at least an hour or two. Where it is desired to make the emetic operate, it may generally be effected by giving the patient a dose of pepper tea or a teaspoonful of the super-carbonate of soda, or half a teaspoonful of sal æratus dissolved in a tumbler half full of lukewarm water. In cases of great debility, the patient should take occasionally, during the course of medicine, a dose of pepper tea or of composition and No. 6; and after vomiting, milk porridge, chicken tea, or some other kind of nourishment, seasoned with pepper.

3*d*. *The Injection.*—In most cases it is better that an injection be administered in the commencement of the course, before the vapour bath is administered, and another after the operation of the emetic.

The injection may be prepared in the same way as an emetic. A very common form for injections is half a pint of composition tea, adding a teaspoonful of nerve powder to the tea whilst hot, and when lukewarm, a teaspoonful of lobelia powder and as much No. 6. This answers for common cases. Where there is canker in the bowels, and in case of dysentery, cholera morbus, &c., the bay-

berry or No. 3 tea should be used, adding the liquid of the third preparation of lobelia, or two or three teaspoonsful of No. 6, and a teaspoonful of green lobelia.

If the bowels be much disordered, injections will in general occasion more or less pain and distress for a short time, the patient, nevertheless, experiences much relief from the operation. An injection containing lobelia, if retained in the bowels, will often cause sickness at the stomach and vomiting, and effectually relax the system. Recent attacks of disease have in many instances been broken up by such an operation. As a general rule I have observed that patients experience the most benefit from injections that occasion the most distress and pain. Lobelia possesses a property of arousing the sensibility of the stomach and bowels, so that if they are diseased, it causes the patient to feel the disease.

4*th. The Second Vapour Bath.*—The proper time for administering the last steam bath in a course of medicine, as a general rule, is, when the patient ceases to sweat, or becomes restless after the operation of the emetic. If the patient continue to retch and vomit a long time, there is nothing so effectual in settling the stomach as a steaming. When the steaming has been continued long enough, the patient must be showered with cold water or washed with vinegar or spirits, rubbed dry, and kept warm. It is beneficial in many cases to bathe the surface with No. 6, pepper sauce, or stimulating liniment, after the last bath, and when the patient is rubbed dry. This is more especially needed where the skin is in a relaxed condition, as in chronic rheumatism, bronchitis, asthma, consumption, &c. Sometimes the skin is extremely sensitive to stimulants, and if applied too freely, will occasion a severe burning sensation in the skin, which may continue several hours.

Food.—Some persons on reading Dr. Thomson's work, understand him to say that patients, after a course of medicine, may take almost every kind of food. It is those cases where the appetite and digestion are restored that Dr. Thomson alludes to when he speaks of giving almost any kind of food that the appetite may crave. In most cases of disease the digestive powers are too feeble to digest any but the lightest kinds of food, such as barley water, crust coffee, arrow root gruel, and gum Arabic water. Even milk porridge which is generally given after a course of medicine is not adapted to cases of fevers, severe pleurisy, inflammation of the lungs, and in the early stages of almost every sudden attack of disease. It is far better that a patient in the early stage of a severe attack of disease, abstain from food altogether than to take such as will oppress the stomach.

From three to six hours is in general required for a full course or medicine; and except in urgent cases, it is better to allow the emetic to remain on the stomach an hour or two, or at least to avoid forcing the patient to drink largely of teas soon after the emetic is taken.

A Short or Partial Course of Medicine.—In very many instances a full course of medicine is not required; all that is necessary is to restore the natural warmth of the body, and then to give an emetic, dispensing with the second bath.

Emetics without Steaming.—In sudden and violent attacks of disease, as in croup, fits, colic, sick headach, cholera morbus, and in fine, all sudden attacks of disease, an emetic may be given without the previous administration of a vapour bath.

Hot bricks wrapped in damp cloths, placed around a patient, may take, in many cases, the place of the vapour bath. Thus in cases of low fevers, as they are termed, it often becomes necessary to vomit a patient every day when he is too weak to sit up. In rheumatism, when the patient cannot be moved without occasioning severe pain, it may be better, especially in cold weather, to give emetics without moving the patient from the bed. If the weather be warm, however, it will, in the majority of instances, be better to have the patient regularly steamed and showered.

Preparing the Patient for a Course of Medicine.—In sudden attacks, and in all cases of acute disease, a course of medicine may be given as before stated without any preparatory medicine; whereas, in chronic complaints, as in consumption, deep-seated dyspepsia, and in cases where the system is in a cold and torpid condition, a course of medicine will prove more effectual by the patient taking composition several times a day, and three or four compound lobelia pills at night, and continuing the use of these medicines several days before the course is administered.

Repeating the Course of Medicine.—In the first stages of disease, and more especially if the attack be violent, the course of medicine, or at least a partial course, may be repeated daily until the symptoms abate. In small-pox, measles, and scarlet fever, the disease will run its course, and all that we can anticipate from the operation of medicine in these cases is to relieve the symptoms, and aid the constitution to work off the disease in the way which nature or the God of nature has established. In chronic complaints, as in long-standing dyspepsia, consumption, chronic gout, and rheumatism, and whenever there is absence of fever, a course of medicine will seldom become necessary oftener than once in two or three

weeks. In fine, there are many cases of seated disease in which more reliance is to be placed upon fresh air, a change of residence, travelling, sea bathing, and a strict attention to diet and regimen, than upon medicine.

Remarks concerning various symptoms that attend the operation of a Course of Medicine.

I have heard persons say that they never felt better than when going through a course of medicine, excepting the few minutes when the sickness and vomiting came on; and then again, under a different condition of the system, patients will experience great pain and distress. The tendency of the course of medicine is to arouse sensibility and to assist the efforts of nature to overcome obstructions, cast off morbid matter from the stomach, and to restore a natural action throughout the system; and hence the more the system is diseased the more distressed the patient will be when he is made to feel his real condition.

At one time a patient may vomit by merely taking a dose of composition tea, whilst at another, when the stomach is in a different condition, half a dozen doses of composition will not occasion the slightest sickness. Thus a patient with a very foul stomach, will become very sick from taking a dose of composition or of bayberry and pepper during the first steaming in a course of medicine, and after the operation of an emetic and the stomach becomes settled, a pint of composition may be taken without causing vomiting. It often happens, however, that the stomach will not be settled until after the last bath, the patient vomiting freely on having his system warmed by the steam, and by taking stimulants; after which, the stomach will not be disturbed by these medicines, even though they be taken freely.

A vapour bath when administered previously to an emetic, or when the emetic has not operated effectually, may occasion sickness at the stomach, and cause the patient to feel weak and faint for a time; but is often observed to increase the strength when the stomach is not foul. I have on many occasions observed a patient on taking a course of medicine to be much stronger after the last steam, who had felt weak and relaxed from the first in consequence of the disordered state of the stomach. Patients sometimes become sick during the first part of the steaming, and feel as though they cannot sit up, or bear it any longer, but by throwing cold water in the face and allowing fresh air to come to the patient, the sickness will pass off in a short time, and when perspiration becomes free, the patient will experience no difficulty in sitting in the bath the usual time required for the operation.

When the stomach is cold and contains acid, a dose of pepper

or composition tea is apt to cause pain in the stomach, more especially during the first steaming in a course of medicine. In such cases the pain is relieved when the patient belches wind or gas from the stomach. Some No. 6 in hot water, taken as hot as the patient can bear it, will cause the gas to be sent up and the patient is thus relieved. Essence of pepper mint, lavender, or any thing that is good to expel wind from the stomach, may be employed.

The operation of an emetic, which in certain conditions of the system is attended with scarcely any unpleasant feelings, under other circumstances, for instance, where there is great derangement in the stomach and bowels, will be accompanied by distressing sickness and pain. The relaxation and sickness sometimes produced under the influence of lobelia, is said to be very much like extreme sea-sickness. Probably no case of death has ever been occasioned by sea-sickness alone, although it sometimes lasts many days or even weeks, the patient continuing to retch and vomit almost incessantly.

The *alarming symptoms*, as they are termed, seldom or never occur to any considerable degree under the operation of a course of medicine, except where disease is deeply seated, or in patients of a peculiarly nervous temperament. Much, however, depends upon the form of the emetic. Thus, the lobelia seed, given without much stimulus, will occasion more or less relaxation of the system in almost every instance; still the same form and quantity of the medicine will produce great diversity of symptoms in different conditions of the stomach; and in persons of different temperament. I have observed half a teaspoonful of the brown emetic (lobelia seed) to bring on what are called alarming symptoms in patients *who* during a preceding course of medicine had taken five teaspoonsful without producing such symptoms. The following case will serve as an illustration of what I have asserted. An elderly man by the name of Smedley, who had seated consumption, had several thorough courses of medicine administered to him without occasioning other symptoms than those which usually attend the operation, until the ninth course, when the first dose of emetic, which was a small one, brought on the alarming symptoms, so called, that continued more than fourteen hours, when he vomited freely, and soon after fell asleep, and when he awoke he had scarcely any recollection of the strange condition which he had been in during the continuance of the alarming symptoms. This operation appeared to benefit him more than all the previous treatment.

In many instances, patients will experience pain in the stomach or bowels soon after taking the emetic, but which generally continues but a short time, yet sometimes for several hours. In other cases, and more especially when disease is deeply rooted in the system,

the patient whilst under the influence of a course of medicine will exhibit symptoms, well calculated to alarm those who have not witnessed them before, or who do not know that there is no danger to be apprehended. Some will complain of distress in the bowels, throw themselves about the bed, utter broken sentences, speak in a hurried and unconnected manner, sob and breathe very irregularly, get out of bed, make frequent efforts at stool, and be constantly changing position. Sometimes the system will become completely relaxed, and still the pulse have nearly its natural strength; the countenance will be pale, the skin cool, the breathing irregular, and the patient thirsty. During the continuance of these symptoms, there is great commotion in the stomach and bowels as though the vital forces were concentrated there to root out disease, the nervous influence being concentrated in the great sympathetic system of nerves which preside over the functions of the internal organs, a new action is established, and although the patient may suffer much, we often observe that these operations are attended with the most signal benefit. When a patient is very much relaxed under the influence of the emetic, his face, breast and hands should be bathed with vinegar or whiskey, and take occasionally some stimulants, either pepper or composition tea, No. 6, in warm water, or milk porridge well seasoned with pepper. If the patient crave cold water it may be allowed to be taken in small quantities; still pennyroyal or other simple herb tea is more suitable.

In a great number of instances where patients under my treatment have had the *alarming symptoms* during the operation of a course of medicine, very little perceivable effect was produced by any thing that was done. The medicine previously given having taken effect, it seemed to require a certain time for its full operation upon the system, varying in duration, however, according to the circumstances of the case. In some instances the alarming symptoms will pass off in the course of an hour from the time of their commencement, whilst in others they may continue six or eight hours, or even much longer. I once had a patient, who continued with the alarming symptoms thirty-six hours, after which she slept several hours, and the next day was better than she had been for several preceding months, and declared that she would not object to going through a similar operation. On the following week, another course was administered to this patient, distressing symptoms came on such as occurred during the preceding operation, and continued over twenty-four hours. With a view to shorten the duration of the course, I at the suggestion of Dr. John Smith, commenced giving the patient the third preparation of lobelia in tablespoonful doses, repeating the dose every twenty minutes until twelve tablespoonsful were given, and although this evidently assisted the operation of the medicine, still the alarming symptoms continued about thirty hours. This case was one which scarcely promised even a hope of recovery, yet

after undergoing three such operations, her health greatly improved, to the astonishment of all who knew her case.

The following symptoms will often be observed during the operation of a thorough and efficient course of medicine, in cases where the disease is deeply seated, and especially when it is about giving way, to wit: soon after the emetic is taken, the patient complains of pain or distress in the stomach, which soon extends to the bowels; he is continually changing his position; rubs his stomach and bowels and complains very much of distressing feelings. The breathing becomes irregular, respiration being sudden, somewhat like the sobbing of a child. The distressing feelings in the bowels subside, but the patient remains relaxed, the skin colder than natural and contracted: the mucous membrane of the nose is dry, inducing the patient to pick or rub his nose frequently; the tongue and mouth are dry, attended with more or less thirst. The patient makes efforts to get out of bed, frequently feels like having a motion from his bowels; talks in an unconnected manner, and sometimes lies completely relaxed, apparently too weak to raise his hands, and the countenance is pale and contracted. After the lapse of a few, but usually in the course of four hours, and frequently much longer, the patient vomits freely, after which he goes to sleep, his skin becomes moist, he sleeps sweetly, and when he awakes feels much better than he did previously to the operation.

Thomsonians are frequently applied to in desperate cases, where it is impossible to determine whether the disease is curable or not, and notwithstanding the grave charges so frequently against the Thomsonian practice when it fails of removing disease, still a trial should be made, so long as the circumstances of the case furnish grounds for a reasonable hope of success. Courses of medicine are sometimes administered with the view only of affording relief to the patient, the disease being evidently incurable; and yet it would seem that a portion of the community, and some who ought to know better, attribute every death that occurs, where Thomsonian treatment is employed, to want of *skill* in those who have charge of the case. Among the great mass of desperate cases that come under Thomsonian treatment, deaths will, in the very nature of things, occasionally happen unexpectedly and under unfavourable circumstances. In the early period of my practice I was called to attend the wife of Samuel Wheeler, of Wilmington, Del., and found Mrs. W., as I then thought, in a condition to be benefited by a course of medicine, and had determined on having one administered. A dose of composition was prepared, but before it was sufficiently cool to be taken, she expired. Had I arrived two hours earlier than I did, doubtless Mrs. W. would have died whilst under the operation of a course of medicine, and although the medicine might have prolonged the life of the patient a short period, still she could not have survived many hours longer than she did, as mortification had already

taken place. Courses of medicine doubtless have been and will again be administered to patients on the very verge of dissolution, creating not only an unfavourable impression in the neighbourhood where it happens, but a highly coloured and distorted account of the case is carried to various parts of the country. The general good success, however, attending the Thomsonian practice, affords sufficient evidence to establish the belief that it is based upon correct principles, and that this system furnishes the means which the constitution requires to overcome disease; for although it does, and must necessarily fail sometimes of effecting cures, yet what evidence have we that it will not prove successful, when properly applied, in all cases that are curable by means of medicine.

Most patients experience an unusual degree of weakness and general distressed feeling about the time a disease is being removed; the patient feeling discouraged, under the impression that the course of medicine, or other treatment, is too hard for his constitution. In many cases of deeply seated disease, that I have treated and a cure has been effected, the patients were discouraged about the time that the disease was giving way: the system being relaxed, attended with loss of appetite, disgust for medicine, and frequent pain and distress in the bowels.

"CANKER."

The term "canker" is applied by Dr. S. Thomson to vitiated or unhealthy secretions which are formed on the lining membrane of the stomach and bowels in disease. The Thomsonian doctrine in relation to "*canker*" is, that it is caused by cold, and is to be overcome by the use of stimulants and astringents. The stimulants to warm the system and restore the secretions to a more healthy condition, and the astringents (Thomson's No. 3) by combining with the canker, removes it from the coats of the stomach and bowels.

Further remarks in relation to the removal of morbid secretions from the stomach and bowels.—In disease of every form and variety, the stomach and bowels are more or less coated with thickened unhealthy secretions, which are often thrown up by vomiting in the form of little flakes of a skinny-like substance; and passed off from the bowels sometimes in small pieces and at other times in strips a foot or more in length. The first that I ever saw of this false membrane was in the summer of 1834. I had administered a course of medicine to a patient, and accidentally discovered that a large quantity of a skinny-like substance had passed from his bowels. This fact struck my attention at the time, and from that period to the present time, 1843, I have found it to be present in all cases of disease, at least with very few exceptions, and as a general

rule, disease begins to yield as this false membrane passes away. There is no plan of treatment that can be adopted that would prove as effectual in removing this coating of morbid matter from the stomach and bowels, as courses of medicine and a free use of cayenne pepper and bayberry. Avoid cathartics, as they occasion still greater derangement in the secretions, and if given freely to one in perfect health, they will be very likely to occasion a false membrane to be formed on the mucous membrane of the bowels. The indications of treatment are—to restore the secretions by courses of medicine, or by the use of pure stimulants and the vapour bath, together with the use of bayberry or other of the anti-canker medicines.

An essay from the pen of the late Dr. Thomson of Edinburgh, appeared in a medical journal published in the year of 1836, in which the writer gives a considerable number of cases in which a false membrane was discharged from the bowels in different diseases, and patients affected with chronic diseases, were restored to health after the passing off of the false membrane from the bowels, which sometimes closely resembled an intestine.—The passing away of this substance in the cases reported does not seem to have been brought about by medical treatment, but rather by the efforts of nature, and generally after a sudden attack of fever, colic, or other acute attack of disease.

Thousands of children have died annually of bowel complaint, and cholera infantum, that might have been cured if the proper means for removing the false coating that lines the stomach and bowels had been early and perseveringly applied. The remedies employed in the old practice in general, excepting the dewberry and blackberry root, are not adapted to the removal of the morbid secretions, and until this false membrane is removed from the stomach, digestion cannot be restored ; and the powers of life consequently become exhausted.

BLOOD-LETTING.

Taking away blood does not remove the cause of disease, but, on the contrary, its direct tendency is to prostrate the curative actions of the constitution, and although patients may experience relief from pain, by the abstraction of blood, still the cure may be very much retarded by it and it may cause the death of the patient. A person in health may lose a large quantity of blood without experiencing other inconvenience than debility, for when digestion

is carried on with considerable vigour, the blood is soon replaced. But in disease where the digestive powers are greatly impaired or suspended, the loss of blood cannot be readily supplied, and if the bleeding be carried to a great extent the patient will be very apt to remain a long time in feeble health, and very probably be left with some deeply seated chronic disease, dyspepsia, liver complaint, consumption, or dropsy.

The blood furnishes the organs with power to carry on their functions, and to resist the causes of disease: and in proportion to the quantity of blood taken from the body will the system lose its power of resisting disease. An undue accumulation of blood in a part is always attended by a deficiency of it in other parts, and we have sufficient evidence to warrant the assertion, that the Thomsonian practice, if properly applied, will prove more effectual in equalizing the circulation of the blood than any other plan of treatment that has ever been pursued—the patient still retains his blood to aid in restoring his lost health.

A patient having a good constitution may, in the early stage of disease, be bled profusely, and recover his health, not in consequence of the loss of blood, however, but in spite of the bleeding; whereas, in a later period of disease, where the vital powers of the patient are much enfeebled, or in very young or very aged persons, the loss of even a few ounces of blood would be very liable to be followed by extreme prostration, and probably cause the death of the patient. That blood-letting removes pain, lessens fever, or relieves the head, is no evidence that it cures disease, for these very symptoms, pain and fever, are in general, the consequence of the vital powers resisting disease; and what can be more absurd than to break down the living power, in order to relieve pain. But blood-letting will not always relieve pain, except the patient be brought so low by it as to destroy his sensibility; and very often in cases where pain is relieved by a copious bleeding, it will return again in a more aggravated form, the constitution having to struggle not only against the cause of disease, but also against the effects of the loss of blood.

Patients not unfrequently bleed profusely during the eruptive fever of small-pox; the physician supposing the disease to be bilious fever. The consequence of this treatment has been, in some instances, to sink the vital powers so low, that the eruption has never been fully developed, the patient made a sacrifice to legalized quackery.

Formerly, it was the universal opinion that blood-letting was necessary in cases of severe bruises, to prevent the occurrence of inflammation. Experience and observation, however, does not confirm the propriety or necessity of this practice. Look, on the other hand, and we will find that the most experienced surgeons admit the danger of drawing blood in cases of severe injuries, especially

immediately after an injury, before the system reacts. Dr. M'Clellan in lecturing upon the subject of severe injuries and the prevailing practice of bleeding patients immediately after their occurrence, said: "By far the greater portion of deaths which occur in these cases, are occasioned by too frequent and continued bleedings before the system has had time to recover from the shock. Thousands and tens of thousands of lives have been destroyed by this practice."

A physician of the old school told me not long since, that formerly he thought he must bleed whenever he saw evidences of inflammation, but that within the last few years he had almost abandoned this practice of bleeding, and found that his patients now recovered more speedily and effectually even from inflammatory diseases than when he resorted to its use. The fact is, in the regular practice there is no general established principles for treating disease; almost every physician having his favourite hobby. Thus one will prescribe anodynes under the same circumstances that another would employ bleeding, while a third would administer some favourite cathartic; and a fourth depend exclusively upon counter-irritation, such as cupping, blisters, &c.

A patient is taken with pleurisy, for instance, and his physician bleeds him and the pain is relieved; on the following day the pain returns, and the doctor resorts to the same means which relieved the pain before, and in this way the bleeding is often repeated until the vital powers are sunk too low to react, and the patient sinks from loss of blood, or if he recovers, it is generally by very slow degrees.

Dr. Marshall Hall in his work on the morbid and curative effects of the loss of blood, has given a number of cases proving the fact, that though a blood-letting may relieve pain, it may cause the death of the patient.

In cases of a severe bruise the old school doctrine is to bleed and purge with a view to prevent inflammation. When a patient is injured, inflammation is necessary, in order to repair the injury. This is *nature's method*—Injuries cannot be repaired without inflammation, and the more vigorous the general health of the patient is, the sooner will the injury be repaired, and the less liability will there be of the inflammation assuming an unhealthy character.

An ordinary bilious or remitting fever is often converted into a disease of a malignant character by blood-letting. In like manner healthy inflammation may assume an unhealthy character by reducing the vital principle—the restorative power, by taking blood.

That a patient may experience relief from losing blood is not proof that his condition is improved or his situation rendered less dangerous by it. Taking away blood to relieve pain is as un-

philosophical as to give arsenic or any other violent poison for the same purpose. The cause of disease is not removed by either plan. There are poisons which when administered even in Homœpathic doses will relieve pain and change the form of disease, but will not remove the cause; for although patients get well under such treatment, it is through the efforts of nature in defiance of the poisonous medicines. Physicians prescribe arsenic in intermitting fever which will change the symptoms—there may be no more ague, but a disease will remain more difficult to get clear of than ague.

Pain that would be relieved by an ordinary blood-letting, would be more effectually removed by a Thomsonian course of medicine, or even by a vapour bath. Under the bleeding practice, pain is relieved by prostrating the power of reaction; whereas, under Thomsonian treatment the circulation is equalized, and the obstructions removed that cause the pain.

The fact of the matter is just this: under favourable circumstances a patient may lose a large quantity of blood without endangering his life; but under other circumstances the loss of a few ounces would cause the death of the patient. Physicians learn under what circumstances blood-letting can be best borne without endangering the life of the patient, but the principle of this practice is wrong under all circumstances. It will relieve pain, lessen fever, and reduce inflammation, but an invariable effect is to impair the digestive and nutritive functions, and to weaken the power of resisting disease. In all cases of severe attacks of disease, where blood-letting is deemed a proper practice by physicians of the old school, the Thomsonian remedies, well applied, will not only prove more effectual in relieving pain and curing the disease, but it is a safe practice.

STEAM OR VAPOUR BATH.

Although the use of the vapour bath as a means of curing disease, was employed many centuries back, still the principle upon which it operates in removing disease, was not fully explained, nor its utility in aiding the operation of medicine appreciated before the time of Samuel Thomson.

The vapour bath constitutes an important part of the Thomsonian system of practice, fulfiling several important indications in the cure of disease. It diffuses warmth through the system, equalizes the circulation, imparts electricity to the blood, and increases the sensibilities of the system to the impression of medi cine.

"I had but little knowledge of medicine," says Samuel Thomson, "when through necessity I discovered the use of steaming, to add heat or life to the decaying spark; and with it I was enabled by administering such vegetable medicines as I then had a knowledge of, to effect a cure in cases where the regular practitioners had given them over."

"In all cases where the heat of the body is so far exhausted as not to be rekindled by using the medicine, and being shielded from the surrounding air by a blanket, or being in bed, and chills or stupor attend the patient, then applied heat by steaming becomes indispensably necessary; and heat caused by steam in the manner that I use it, is more natural in producing perspiration than any dry heat that can be applied to the body in any other manner; for a dry heat will only serve to dry the air and *prevent* perspiration in many cases of disease, where a steam by water or vinegar would promote perspiration and add a natural warmth to the body, and thereby increase the power of life and motion and aid in removing disease."—*Thomson.*

We often hear persons say that when they were bled the blood was almost black, and so thick that it would scarcely run, and they conceive that their blood was bad and had better be taken away. The blood becomes thick and dark in consequence of its slow and torpid circulation for want of heat. Place a patient in the condition just mentioned, in a vapour bath at a proper temperature, and in less than twenty minutes the character of this blood will be changed, so that instead of being almost as thick and dark as molasses, as it was before the steaming, it will be of a natural colour and consistency, in consequence of the warmth and electricity imparted to it from the steam, which also restores the natural current of its circulation through the lungs.

There is scarcely a form of disease or a condition of the system in which the vapour bath may not be employed, not only with safety but benefit. One of the most important objects gained by the application of the vapour bath, is adding warmth and electricity to the blood. It has been ascertained that in disease even of the most inflammatory character, the blood contains less electricity than it does when in a healthy condition, and by applying the vapour bath in the early stage of pleurisy, or rheumatism; the disease in many instances will be removed by it.

Disease of an inflammatory character generally procceds from cold, and the buffy coat which appears on blood drawn from one labouring under an inflammatory disease, may be attributed to the want of a sufficient amount of heat and electricity in the blood. Dr. Marshall Hall in his Practice of Medicine, p. 340, observes: "Some practitioners continue to let blood in most cases of acute rheumatism, thinking themselves justificd in their mode of practice by the sizy appearance of the blood. The same principle might

lead them to empty the whole sanguiferous system ; for, every time blood-letting is repeated, the blood becomes more and more dense, or sizy. I have further observed," says he, "that, by bleeding repeatedly, the pains, swellings, and febrile symptoms, were not only aggravated at the time, but often protracted infinitely: at least I have seen them continue, under such a mode of practice, upwards of two months."

The vapour bath may be employed with immense benefit in disease of the urinary organs; as stranguary, gravel, retention of urine, inflammation of the lungs, &c.

I have known a slight attack of jaundice cured by a single vapour bath followed by an emetic. In croup, where the disease has continued several hours, the vapour bath is almost indispensable, in order to restore the natural warmth of the blood, and assist the operation of the medicine. Professor Chapman in a lecture last winter, said that he had recently been called to a case of croup in consultation where the application of the vapour bath proved effectual after various other means had been employed three successive days without effecting any change for the better. The patient continued in the bath three hours at a time. In croup the blood is sometimes in a condition which occasions the formation of a false membrane in the wind-pipe, which if not arrested finally fills up the cavity of the wind-pipe to such an extent as to cause suffocation. In such cases, besides the free use of lobelia and stimulants, the vapour bath must be perseveringly applied with a view to restore the natural warmth of the blood and thus overcome its *plastic* condition.

In asthma when the system is in a cold and torpid condition, medicine will often fail of affording much relief without the previous use of a vapour bath. In this form of disease I have found the *hot air* bath to be as effectual as the vapour bath, and it may be administered with much less trouble.

Ordinary headach is speedily cured by a vapour bath.

In dysentery and bowel complaints in general, the use of the vapour bath is attended by the most signal benefit.

In eruptive diseases, nettle-rash, small-pox, scarlet fever, varioloid, and measles, the vapour bath may be used with benefit at any stage of the disease. If the eruption be slow to appear, applying a vapour bath will bring it out to the surface ; or if there be a tendency to a retrocession or striking in of the eruption, the vapour bath should be applied, or at least a moist heat should be applied around the patient, and powerful stimulants given, as the third preparation of lobelia, and stimulating injections. In every stage of small-pox the vapour bath is grateful to the patient and aids the constitution in working off the disease. In the later period of small-pox when scabs are forming and the patient much distressed, the steam bath will afford more relief than any other means that can be employed; and when the scabs are dry and falling off there

can be no better means employed for restoring the natural healthy condition of the skin than steaming. Scarlet fever and measles are very liable to be followed by dropsy, running of the ears, swelling of the glands, &c., arising in part from an unhealthy condition of the skin, which may be remedied by steaming the patient two or three times about the termination of the eruptive disease.

The duration of erysipelas may be shortened and the symptoms mitigated by steaming, and in severe cases it should not be neglected.

The vapour bath may be employed with especial benefit in all cases of dropsy except when the disease is incurable.

In violent colds and catarrh where the breathing is greatly oppressed or the skin dry and husky, or cold and clammy, and the patient much distressed, the use of the vapour bath becomes highly necessary, not only to relieve the distressing symptoms but to facilitate the operation of medicine. Thousands of patients die annually of consumption that in its early stage is curable under Thomsonian treatment.

"In all cases of falls or bruises, steaming is almost infallible; and is much better than bleeding, as in the common practice which only tends to destroy life instead of promoting it. If the person is not able to stand over the steam, it must be done in bed as has been described. Give the hottest medicine inside that you have, and keep the perspiration free until the pain and soreness abates, and the strength will soon be restored. If the advantages of this mode of treatment were generally known, bleeding in such cases, or in any other to remove disease would never be resorted to by the wise and prudent."—*Samuel Thomson.*

In *peritonitis*, which is a very fatal form of disease, the vapour bath should be promptly and perseveringly applied, besides giving largely of lobelia and pure stimulants.

In inflammation of the lungs, liver, stomach, bowels, or any other of the internal organs, the use of the vapour bath will be found to relieve pain, assist the operation of medicine and shorten the course of the disease.

In "*low fevers*," as they are called, where the heat and strength of the patient are far reduced, I have observed marked benefit to result from the application of steam to the patient. A patient who is too weak to sit up or even to raise his head, will bear steaming on a couch or mattress in many instances over an hour without being debilitated by it, provided proper attention be paid to bathing the face and surface of the body occasionally with spirits or vinegar and giving stimulants. The most remarkable recoveries from "low malignant fevers," as they are termed, that I have known, have been where the vapour bath has been administered frequently and the third preparation of lobelia administered freely, both by

injection and to the stomach. In these cases the steam was of course applied to the patient in bed or on a settee.

The vapour bath forms an important auxiliary in the treatment of rheumatism, gout, lumbago, palsy, hysteria, chlorosis, neuralgia, consumption, fevers of every variety, scrofula, &c.—Finally, the application of warmth to the body by means of steam aids the efforts of nature to overcome disease of every variety, that is curable by the aid of medical treatment.

"Some who practice according to my system" (observes Dr. Thomson) boast of carrying their patients through a course of medicine in a shorter time without the trouble of steaming; this is easily accounted for; steaming is the most laborious part of the practice for those who attend upon the sick, but the most useful to the patient; as one full course of medicine, in which the patient is steamed both before the emetic is given and after it operates, will in general be more effectual in removing disease than four emetics without the steaming."

The steam bath affords a protection to the system against sickness; and when applied in the early stage of many forms of disease, will effectually prevent it from becoming seated, by restoring the lost heat, promoting the secretions, and removing obstructions.

If the efficacy and safety of the steam bath in *midwifery* was geerally known, the practice of bleeding would become entirely abolished; for no sensible woman would willingly submit to be bled, who had a knowledge of the utility of steaming, and more especially of courses of medicine. By means of the vapour bath and lobelia the muscles may be more effectually relaxed than by bleeding, and at the same time the secretions are promoted and nature assisted without the least possible degree of danger to the patient, from the treatment.

For pain in the back and loins during pregnancy the steam bath may be used with much benefit.

False labour pains will be removed by the use of the vapour bath; whereas true labour pains will be increased by it. This fact I have seen tested on many occasions. Not long since I received a message to attend Mrs. C——g in Currant alley, who it was supposed was in labour. The patient had regular pains about every fifteen minutes, which had continued over twenty hours. I directed a dose of composition to be given, and an injection of composition tea with a teaspoonful of green lobelia to be administered. These had the effect to diminish the frequency and intensity of the pains. A vapour bath was then applied which dispersed the pains entirely, and Mrs. C——g had no more return of pains until the lapse of two weeks when they returned, and the same means were employed as on the previous occasion above

spoken of, and the pains being true labour pains they were strengthened and aided by the same treatment that expelled the false pains.

The above is only one of many instances in which I have known false labour pains entirely to disappear under the use of the vapour bath, lobelia and stimulants, and I have never yet seen this treatment fail to increase and assist true labour pains. If Mrs. C——g had been under the treatment of the old school practice and ergot had been administered, as it very often is under the same circumstances that attended this case, the uterus would have been thrown into violent spasmodic contractions, and it is not easy to say what the consequence might have been. It cannot be questioned but that in thousands of instances ergot has been given, and then the forceps resorted to, in cases of premature or false pains that would have been dispersed by the use of the vapour bath, lobelia, and pure stimulants.

In disease that comes on by paroxysms as in ague, hysteria, and neuralgia, a very signal influence is exerted by a vapour bath administered a short time before the paroxysm is expected to come on.

Opinion of various writers concerning the Vapour Bath.

"The vapour bath is attended by the very best effects, particularly in chronic ailments, and there can be no question that its action is chiefly on the skin, and through that medium on the nervous system. As a means of determining to the surface, promoting cutaneous exhalation, and equalizing the circulation, it is second to no remedy now in use; and, consequently, in a variety of affections which this process is calculated to relieve, it may be employed with every prospect of advantage."—*Combe's Physiology.*

"To the wars between Napoleon and Russia is western Europe indebted, if for nothing else, to the introduction of vapour baths. Prussian soldiers having constructed them in the north of Prussia, some of the Prussian physicians were induced to observe the effects of this new fashion of bathing. They soon found that it cured various diseases, such as rheumatism, and cutaneous affections, and were not slow in giving notoriety throughout Germany by means of various publications. The king of Prussia caused a bath to be constructed at his palace; and in 1818, the Princess Marianne, sister-in-law of this sovereign, was present at the opening of the first public vapour bath at Berlin, and allowed it to receive her name."—*Eclectic Journal of Medicine.*

"Of all Turkish remedies the vapour bath is the first and most efficacious in rheumatism and cutaneous diseases. I have seen

them removed in one fourth part of the time in which they are commonly cured with us."—*Dr. Madden.*

"If life be nothing but a brief succession of ideas, the rapidity with which they now pass through the mind would induce one to believe, that in the few short minutes which he has spent in the bath, he has lived a number of years."—*Sir John Sinclair.*

"The vapour bath may be used with decided advantage in all seasons, as it is in Prussia, and in Asiatic countries. It is a vulgar error, contradicted by general experience, to suppose that vapour, or warm bathing, is contra-indicated in winter, as disposing those who bathe to contract colds."—*Doctor Schmidt.*

"Major Long, who made an expedition to the Rocky Mountains subsequent to the time of Lewis and Clark, informs us, also, that the Indian *sweating baths*, as he terms them, are in high repute for the cure of many disorders. He remarks, that they are generally constructed near the edge of a water course, and formed of pliant branches of trees, stuck into the ground in a circle, bent over at the top, and covered in every part with bison robes. Some of them contain only one person, and others four or five. The invalid enters with a kettle of water and some heated stones, on which the water is sprinkled, until the requisite degree of steam is produced. When it is thought that the perspiration is sufficiently profuse, the patient is taken out and plunged into the water, previously breaking the ice, if the stream is frozen. He is not subjected a second time to the action of the steam, but covers himself with his robe and returns home."—*Mattson's American Vegetable Practice.*

"Lewis and Clark mention a remarkable cure which was performed with the vapour bath, during their expedition. One of their men had so great a weakness in his loins, that he could not walk, nor even sit upright without extreme pain. They exhausted the resources of their art upon him in vain, and, at length, at the suggestion of an Indian hunter, and at the request of the patient himself, they placed him in a vapour bath, with the steam as hot as it could be borne. In twenty minutes he was taken out, plunged twice in rapid succession into cold water, and returned to the bath. During this time he drank freely of horse-mint tea. At the end of three quarters of an hour, he was again withdrawn, carefully wrapped, and suffered to cool gradually. The morning after the operation, he was able to walk, and nearly free from pain."—*Ibid.*

"The prevalent fear of catching cold, which deters many from using the vapour bath, even more than from warm bathing, is founded on a false analogy between its effects and those of profuse perspiration from exercise or illness. The latter weakens the body, and by diminishing the power of reaction, renders it susceptible of

injury from sudden changes of temperature. But the effects of the vapour bath, properly administered, are very different. When not too warm, or too long continued, it increases, instead of exhausting the strength, and, by exciting the vital action of the skin, gives rise to a power of reaction, which enables it to resist cold better than before."—*Combe's Physiology.*

HOT AIR BATH.

Various kinds of apparatus have been constructed for the purpose of applying the heat from burning alcohol to the body for the cure of disease. The following method will do very well where there is no apparatus for the purpose at hand, namely:—Place a teacup two-thirds full of alcohol, or any kind of spirits that will burn, in a bowl containing sufficient cold water to come within half an inch of the top of the cup. Set these under a wooden bottomed chair, about the centre; place the patient on the chair, remove all clothing, and throw a quilt over the patient and chair, leaving the head uncovered. Set fire to the alcohol under the chair, and if it becomes too hot, the quilt may be raised at the bottom, so as to admit cold air. In applying this bath, care will be necessary to prevent the cover from coming in contact with the blaze. When the patient becomes oppressed with the heat, the face and breast must be washed with cold water, vinegar, or spirits.

Where the skin is cool, relaxed, and tending to perspiration, as in chronic rheumatism, asthma, &c., the hot air bath may be employed in place of the steam bath.

A quilt is preferable to blankets for covering the patient, when the vapour or hot air bath is applied. If blankets or sheets be employed, they should be clean, otherwise the air in the room will become contaminated with foulness.

Another Method.—By having a tin basin, containing a portion of hot water, placed over the blaze of the burning alcohol, steam will be generated, rendering the heat less oppressive than the dry hot air bath. The basin of water may be placed in a frame similar to those used for chafing dishes. This last method may be employed in the place of the regular steam bath, in almost all cases.

PARTIAL STEAMING.

The plan of applying steam to the lower half of the body, was first introduced by Dr. A. C. Logan. To administer the hip vapour bath, the cover must be fastened around the waist, instead of the neck. It is particularly applicable to cases of palsy of the lower extremities, hip disease, white swelling, indolent ulcers on the limbs, obstructed menstruation, strangulated hernia, swelled testicles, and dropsy of the legs. Applied in this way to the lower half of the body, it may be borne without inconvenience for an hour, or even several hours together, and much credit is due Dr. Logan for this method of steaming in certain cases.

Toothach, pain in the face, swollen and painful breast, may be relieved by the application of steam to the affected part.

In cankered sore throat, scarlet fever, quinsy, and in severe colds attended with dryness of the throat and oppressed breathing, benefit may be derived by inhaling the vapour from hot vinegar and water.

The following is from Constable's Miscellany, as given by the celebrated Urban Chevreau, Secretary to Christine of Sweden.

CURE OF FEVERS IN SWEDEN.

"One thing which I saw in Sweden surprised me. The peasants who have fever, take a quantity of beer, into which they put ginger, cloves, cinnamon, and having heated it as much as their mouth and stomach will bear, they drink it off. The practice is successful."

"They have also another remedy which would appear a startling one to inhabitants of our climate. They have dry stoves which they call *bastou*, into which they enter naked, and when the perspiration is profusely produced on all the body by the heat of the stove, they immediately come out and lie down among the snow, or, if they can swim, throw themselves into the water. Our physicians may judge how far their aphorisms agree with the experience of these peasants." This was published during the life of the author who died in 1701, and may serve to show to the incredulous *faculty* that steaming is no new doctrine, and it also exhibits a striking analogy to the practice of our North American tribes in cases of fever.

OF THE UTILITY OF LOBELIA EMETICS IN THE CURE OF DISEASE IN GENERAL.

Thomsonian emetics constitute the most effectual remedy employed in the treatment of disease. There is scarcely a form or variety of disease in which the use of emetics will not prove beneficial, and in many instances they are indispensably necessary to the recovery of the patient.

Previous to the discovery of the medical properties of lobelia by Samuel Thomson, poisonous articles were employed almost exclusively as emetics. Even now the medical profession continue to prescribe the same deleterious articles, notwithstanding the evidence afforded of the efficacy of lobelia emetics in cleansing the stomach, and likewise knowing—as they might know if they would, that it possesses no deleterious qualities.

In some cases of slight or sudden attacks of disease, all that is required by the operation of an emetic is merely to throw off the foul contents of the stomach, which had oppressed and disturbed its functions. But where disease has become seated, other important objects are obtained by the operation of Thomsonian emetics. They relax the system, and in this way overcome obstructions, equalize the circulation of the blood, and of the nervous influence; invigorate the energies of the stomach, and remove morbid secretions from its mucus surface; restore the secretions, and in fine assist the constitution in resisting disease, and thus aid her efforts in restoring health.

Whenever there is a general *fever* pervading the body, it is evidence of a diseased condition of the stomach; and hence in fever, the use of emetics are particularly indicated. Whether a fever arise from undigested food in the stomach, worms in the intestines, its energies sunken or its functions prostrated by the poisonous influence of marsh effluvia, or from previous exposure to cold, Thomsonian emetics may be given with benefit.

In measles, scarlet fever, and small-pox the disease will be rendered more mild in its character, less dangerous, and sometimes of shorter duration by the early administration of a Thomsonian emetic.

In diseases of children, emetics constitute by far the most efficient remedy. *Vomiting* is nature's method of relieving the stomach in infancy. We can scarcely do wrong in giving emetics to sick children, more especially at an early stage of disease.—In cases of sudden attacks of fever, croup, convulsions, &c., lobelia should be given freely, either the powder in warm teas or in simple warm water, the tincture, or the third preparation.—The latter is particularly adapted to cases of spasms, and in cases where the

heat of the system is very low, and in the advanced stages of disease. No danger need be apprehended from vomiting a child too much in croup, nor in any other violent attack of disease; nor of relaxing the system too much with lobelia.

In protracted chills, where the patient is in a stupor, the third preparation of lobelia should be given freely, with the application of external warmth and friction to the surface with a view to bring on reaction.

"Emetics" (observes Professor Chapman) however beneficial they may operate as mere evacuants, produce effects not less salutary in another way. Whatever may be the cause, fever as has already been shown, is a result of sympathy, having, for the most part, the primary link of its ultimately lengthened and complex chain, in the stomach. To expel, therefore, the offending cause, or to subvert the nascent impression which may be created, before it becomes invigorated, diffused, and fixed, vomiting is obviously the remedy."

"Erysipelas of the face, I have benefited, or entirely removed by vomiting—and in several instances, have derived scarcely less advantage from the same remedy, when the brain becoming affected, stupor has supervened."

Emetics administered in the early period of scarlet fever will sometimes exert a most signal influence in moderating the violence, and in shortening the duration of the disease.

In case of bleeding from the lungs, the effect of the operation of emetics is to attract blood from the lungs and diffuse it through the system, by which the bleeding will be checked.—Warm foot baths, or the vapour bath should be employed to aid in restoring the natural equilibrium of the circulation of the blood. "In support of this practice, it may be proper to mention, that it appears on good authority, that the late Dr. Willis, so celebrated for his skill in the treatment of mania, and especially the cure of George III. of England, resorted to emetics in all cases of hemoptysis," (bleeding from the lungs,) and declared that the lengthened experience of nearly half a century had taught him to confide in them above all other means as well on account of their safety as efficacy."—*Chapman's Therapeutics.*

In bleeding from the stomach, in which case blood will be raised by vomiting, the employment of active emetics are indicated, not only for dislodging accumulations of blood in the stomach, which may have oppressed its energies; but to cause a distribution of blood throughout the system, and to strengthen the weakened capillary vessels of the mucous membrane of the stomach. I have found the third preparation of lobelia, given freely, together with the application of the vapour bath, to be successful on several occasions of bleeding from the stomach, and have never known it to fail in checking the hemorrhage.

In uterine hemorrhage the flow of blood may in general be controlled by active emetics, aided by the use of stimulating enemas to the bowels.

In severe colds and sore throat, either from inflammation or the existence of ulcers, emetics are of great utility.

Emetics are more effectual than any other remedy in the cure of consumption, bronchitis, and other forms of disease of the chest.

The most severe paroxysms of asthma may be overcome by a thorough emetic, more especially when the emetic is preceded by the application of a vapour bath, rendering the system more sensitive to the impression of medicine.

In pleurisy and inflammation of the lungs, emetics may be employed with great advantage, more especially in the early period of the disease. I have never observed the act of vomiting to be attended with much pain or difficulty in the most violent cases of pleurisy and inflammation of the lungs. As a patient sickens, the system becomes relaxed, which affords an explanation why a patient may vomit with so little pain or difficulty when there is active inflammation in the pleura or lungs.

"In their wide and pervading operation they (emetics) subdue or have a tendency to subdue vascular action, to remove cutaneous constriction, promote absorption from the lungs, facilitate expectoration, lessen dyspnœa, cough and sanguineous discharge, to calm the system by equalizing excitement, and thus re-establishing that just balance in the distribution of the blood, on which the restoration and maintenance of health so materially depends."

In whooping cough more benefit may be derived from the use of emetics than from any other remedy. In violent cases an emetic should be given daily, or even two or three times a day. In those cases when violent paroxysms of coughing are observed to come on at certain periods, it is a good practice to place the patient under the influence of lobelia, given even to the amount necessary to cause free vomiting previously to the time at which the paroxysm of coughing usually comes on.

Emetics form an important part of the treatment for rheumatism, lumbago, gout, neuralgia, &c. No remedy under my observation has produced so much relief in these forms of disease as active emetics; their efficacy will be greatly enhanced by the previous application of a vapour bath.

Of the various remedies that have been employed in the treatment of dyspepsia, emetics have proved the most successful.—Even in cases where there is extreme tenderness at the pit of the stomach, an emetic after a vapour bath will afford more relief in general than any other remedy. In the early stage of dyspepsia, digestion in most instances, may be restored by one or two active emetics, followed by the free use of cayenne pepper at meals.

Sick-headach, depending upon a disordered condition of the stomach, may be more speedily relieved by a prompt emetic than by any other remedy. Besides the speedy relief which the operation of emetics affords, they sometimes break up the disease altogether, the patient being freed from subsequent attacks.

Emetics are well adapted to the cure of every variety of colic, or cramp in the stomach. "To induce general relaxation, and to excite the biliary secretions, a deficiency or suspension of which, he considers as an accessary cause of some of the cases of obstinate constipation in colic, Professor Hosack has given emetics, as he states, with great success."—*Chapman.*

In diarrhœa, dysentery and cholera morbus, digestion is lost, and the stomach contains more or less foul matter, and its mucous surface is coated with thickened secretions, oppressing its functions. Hence to excite free vomiting is particularly indicated in the cure of such disorders. Besides relieving the stomach of foul matters, Thomsonian emetics exert a beneficial influence upon the secretions, cause a determination to the surface, restore capillary circulation, and aid the efforts of nature to restore healthy action in the mucous membrane of the bowels. Many have doubtless died of these complaints that might have been cured by prompt emetics.

Epilepsy, or falling sickness, is in many instances occasioned by an oppressed or otherwise disordered state of the stomach, demanding the use of emetics. "By exhibiting them just before the accession of the paroxysm, they will often prevent it, and even if they fail in this respect, they render it milder and of shorter duration. Nor is this all which they accomplish. By the strong and direct impression made on the stomach, the commencement in that organ of the wrong association constituting the disease, is broken, and afterwards it yields more readily to tonics."

"Nearly the same views, I think, may be taken of hysteria. Even admitting that the disease is mostly radiated in the uterus, it does unquestionably often proceed from gastric irritation, and demands to be treated accordingly. Whatever may have been the immediate cause of the paroxysm, I have found, when exceedingly vehement, no remedy half so effectual as vomiting. It promptly allays the convulsive agitations of the nervous system, and produces a state of mental composure which invites to sleep." —*Chapman.*

Apoplexy brought on, as it often is, by a mass of undigested food in the stomach, calls for the free exhibition of emetics, of which the third preparation of lobelia is the most appropriate. Lobelia should also be administered by injection and allowed to be retained in the bowels, to assist in exciting vomiting, relax the system, and equalize the nervous influence. Even if the seat of

apoplexy be in the brain, and incurable, as it often proves to be, still the treatment can do no harm.

Mania is generally associated with, and not unfrequently dependent upon, a disordered condition of the stomach. Many cases have been cured by free vomiting with stimulating emetics.

In long-continued dyspepsia, as in other forms of seated disease, the mucous membrane of the stomach becomes more or less coated with a false membrane; a general torpor then pervades the system, the nervous energy is prostrated, and the energies of the mind often greatly depressed. In such cases there is no plan of medical treatment which promises equal success with that of the frequent use of the steam bath and stimulating emetics. These means will prove the most effectual in restoring the secretions, and causing the detachment and removal of the false membrane lining the stomach. Without effecting this the functions of the stomach cannot be restored. I have on many occasions observed that patients who had been long affected with dyspepsia, are very liable to experience severe pain under the operation of an emetic, and often complain of feeling worse about the time the disease is breaking and a more healthy action taking place.

Affections of the head, in general, proceed from derangement of the stomach, so that not only in sick-headach are emetics indicated, but the most violent neuralgic pains in the head, accompanied with extreme tenderness of the scalp, will sometimes be promptly relieved by free vomiting. "Early adopting the notion," says Dr. Chapman, "that this complaint proceeds from a morbid condition of the stomach, the only two cases of it which have come under my care, I have managed by emetics, and had reason to be entirely pleased with the result. Even genuine tic-doloreux, the neuralgia of some writers, has been cured in several instances, by this same practice, and with such facility as to place it, in my opinion, decidedly above all other modes of treating this most painful, and hitherto nearly unmanageable affection."

Diseases of the eye, as amaurosis, and acute inflammation of this organ, have been more successfully treated by active emetics than by any other plan. It is only in the early stage of amaurosis, however, that so much reliance is to be placed upon emetics.

The operation of emetics in connexion with the use of the vapour bath, are applicable to cases of *dropsy*. Besides cleansing the stomach, placing the system under the relaxing influence of lobelia promotes the action of the absorbent vessels, and consequently the use of this remedy is particularly well adapted to cases of dropsy.

Emetics form an important part of the treatment for the cure of jaundice. I know a case of this form of disease which was cured by the administration of a vapour bath and an emetic, the patient

having taken freely of composition and compound lobelia pills a few days preceding the bath and emetic. Cases that are more deeply seated, however, will require, as do other forms of seated disease, a repetition of courses of medicine, together with the appropriate intermediate treatment.

An occasional emetic will be serviceable in every variety of scrofula.

Persons labouring under the poisonous effects of mercury will experience benefit from the use of the vapour baths and emetics.

It is asserted by some medical writers that diabetes has been cured by the operation of emetics. This disease, however, is often incurable, as in many instances it is the consequence of the wearing out of the constitution.

Torpor of the Liver, which attends jaundice and bilious fever, has frequently been removed, and the functions of this important organ restored through the influence of vapour baths, and active emetics. To restore the natural temperature of the blood and impart electricity to it, by the steam bath; to relax the system with lobelia; together with the influence of straining efforts to vomit, constitute the most effectual means of relieving congestion of the liver, and of restoring its functions. Lobelia administered by injection, and retained, exerts the same beneficial influence upon the system as when taken into the stomach.

Whenever the system experiences a severe shock, as by falling from a height, a violent blow, or by a severe burn or scald, digestion will be suspended, and if the accident should happen soon after, or within an hour or two after the patient has taken a hearty meal, the stomach should be evacuated by an active emetic. This may save the patient a great deal of suffering and materially lessen the danger of the injury.

Thomsonian emetics may be employed with perfect safety during every stage of pregnancy; and most of the derangements of the system consequent upon that state, such as a feeling of fulness, dizziness, or violent pain in the head; pain and distress in the back and loins; extreme sickness; water brash; and distress at the stomach, may be relieved, and frequently entirely removed, for a time at least, by an active lobelia emetic preceded by the use of an enema, and a vapour bath. I have known females to be carried through from three to nine Thomsonian courses of medicine during the last two weeks preceding their confinement, invariably deriving benefit, and generally complete relief from distress, by their operation. A full course of medicine, administered just before confinement, is incomparably the best plan of treatment that has ever been adopted for insuring an easy and safe labour.

Child-bed fever, convulsions, and other forms of disease, which sometimes come on after confinement, doubtless in the great ma-

jority of instances may be prevented, or, at least, the system be placed in a far better condition to resist the influence of the usual exciting causes of disease, by a course of medicine administered in the last stage of pregnancy.

The condition of the stomach excites a controlling influence over local diseases, such as painful swelling in every part of the body, swelled breast, and swellings in the groin, neuralgia, local inflammation, gout, disease of the kidneys, carbuncle, affections of the spine, abscesses, &c. In the early stage, painful swellings in the groin and in other glands may, in many instances, be brought to a crisis, and dispersed without suppuration taking place, by administering vapour baths and emetics, together with a proper use of injections, to assist the action of the bowels.

Just so much as the stomach is disordered will local diseases become generally more difficult of cure. I have known indolent ulcers, of several years' standing, to be healed in a few weeks, chiefly by improving the condition of the system generally, and, more particularly, that of the stomach, by Thomsonian courses of medicine, of which the emetic constitutes, undoubtedly, the most important part of the treatment.

Even when the seat of disease is located principally in the brain, emetics may be given, with great advantage, in many cases.

If a person be injured on the head, or on any part of the body, and the accident occur soon after the patient has taken a hearty meal, a prompt emetic should be given, or the patient be made to vomit freely by some means. If this be neglected, the stomach will be oppressed by a mass of undigested food, aggravating the symptoms, and causing the patient much suffering.

When any poisonous substance has been swallowed, an emetic should be given promptly. The third preparation of lobelia is the most effectual form of emetic in such cases.

When any substance is lodged in the throat, means should at once be taken to cause vomiting. Where this cannot be effected by running a finger into the throat, an emetic of lobelia should be given. If the patient cannot swallow an emetic, vomiting may be effected by administering one or two teaspoonsful of lobelia powder in warm water, by injection, and retained in the bowels. Besides producing vomiting, this treatment will relax the system, and thus tend to overcome the rigidity of the parts in which the foreign substance is lodged, and lessening the difficulty of its being removed.

Finally, in disease, the stomach is more or less coated with thickened tenacious secretions, for the removal of which there is no remedy so effectual as a lobelia emetic, given in combination with capsicum and a strong decoction of bayberry, or sumac.

The stomach possesses a very low degree of sensibility, so that

its functions may be greatly depressed, or disordered, without the patient experiencing any symptoms of disease, except in parts remote from the stomach. One who is subject to a weakness in any part of the spine, will experience an increase of the disease by the stomach becoming more disordered than usual. In many instances disease of the spine has been cured by the use of the vapour bath and emetics.

Eruptions of the skin, such as scald hand, nettle-rash, and tetter, are occasioned in general by derangement of the digestive functions, and these eruptions may frequently be more effectually cured by emetics than by any external applications.

The operation of an emetic, and more especially of a full course of medicine, is of especial benefit as a means of preparing the system for surgical operations.

Case.—A few months since I was desired to visit the wife of a gentleman a few miles from the city, who it was supposed was labouring under cancer of the uterus. She had been subjected to frequent purgings, several large blood-lettings, and she was often cupped. This course of treatment proved not only useless, but the patient was getting worse under it. On commencing taking Thomsonian stimulants she began to improve; a few courses of medicine were given, from which she experienced great benefit. They equalized the circulation, removed the swelling in the lower part of the abdomen, relieved the pain and soreness, under which she had been labouring, and finally, by the daily use of tonics and an occasional vapour bath, and enemas per vaginam and also to the bowels, the symptoms of cancer of the uterus have almost entirely disappeared, and the general health of the patient is restored. The above is only one of hundreds and even of thousands, where the employment of Thomsonian emetics have proved successful in removing seated diseases when the regular practice had failed of doing any good whatever.

ON THE USE OF CATHARTICS, OR PURGATIVE MEDICINE.

Every substance which operates upon the bowels as an active cathartic, whether it be mineral or vegetable, is injurious.—There is a wide difference between restoring the natural action of the bowels by aiding nature, and that of provoking an unnatural action in them by means of cathartics. The intestines possess very little sensibility, excepting that portion called the rectum, which comprises only a few inches of their lower extremity; and it is not until the contents of the bowels pass down within a few inches of the anus, that the inclination to evacuate the bowels is felt. It is only the lower end of the intestinal canal that is supplied with true nerves of sensibility. A substance to be felt in any other portion of the bowels must be of an irritating acrid nature. If there be a superabundance of acid in the bowels, and the person take freely of cayenne pepper, it will be very likely to occasion purging, by awakening in some degree the sensibility of the bowels to the impression of the acid. Substances thrown into the rectum, will stimulate the bowels to evacuate their contents, when the same substance taken by the mouth, will never occasion purging.

We know the general effect of cathartics in a diseased state of the system, by ascertaining their effect upon the system when in a healthy condition. Every physician will at once admit that the use of cathartics is injurious to persons in health—directly tending to disorder the stomach, impair digestion, lessen the determination to the surface, weaken the power of generating heat, diminish the nervous influence, and ultimately prostrate the functions of the bowels. If a person in health take daily a dose of purgative medicine sufficient to produce a free operation, and continue the practice a few days, it will disorder the stomach and weaken the functions of the bowels, so that they will be left either relaxed and irritated, or constipated.

Costiveness is the consequence of the peristaltic action of the bowels being in a weakened condition. Hence costiveness is the effect and not the cause of disease; or at least it is merely one link in the chain of effects arising from loss of vital power, or a weakened condition of the principle of life. A patient applies to a physician for advice. He tells the doctor that he has pain in the head; feels very drowsy and heavy; and has no appetite. The doctor inquires about the condition of the patient's bowels, and ascertaining that they are in a constipated condition; discovers a cause for the headach and drowsiness, and he directs a cathartic

in order to remove the difficulty. But the inquiry should always be extended further to ascertain the cause of the costiveness, and "apply the axe to the root of the tree," instead of employing means which merely change the symptoms, and interfere with the curative operations of nature. By tracing disease to its primary source, we find it to arise from loss of vital power, and this should always be kept in view in the treatment of disease. Medicines often get the credit of curing disease, even where they may have had the effect to increase the distress of the patient and lengthen the duration of disorder.

It is no easy matter to determine the effects of some medicines in slight attacks of disease, or in acute disease in general.—Thus a person by some inaccuracy in diet, or from exposure to cold and dampness, feels indisposed to-day, takes a dose of salts, eats nothing or at least only something very light, keeps himself warm, the physic operates, and to-morrow he will be almost well again, except that he will be costive a few days in consequence of the salts he had taken. The patient attributes the restoration of his health to the dose of salts, yet doubtless his health would have been as speedily and more perfectly restored by the abstinence which he had observed, and being kept warm, without the purging.

Purging, like blood-letting, will modify the symptoms without removing the cause of disease; ultimately tending to disorder the system, and prostrate the vital forces. It will be admitted by every physician that in a sunken state of the system, or in very aged persons, the use of purgative medicine is not only hazardous, but, in many cases, if given to the extent of exciting free purging, would cause the death of the patient.

It is by the efforts of nature that disease is cured. Medicines are only serviceable when they aid the efforts of nature. When the bowels are too inactive, or in any way disordered, the great object is to aid in restoring the power of heat, and of nervous influence, the only way by which the functions of the bowels can be restored to a healthy condition. The direct tendency of cathartics is to lessen the internal heat, and weaken the nervous power. When the stomach is foul, a dose of composition, or bayberry tea, is apt to cause vomiting; not because the medicine possesses emetic properties, but that the sensibility of the stomach is increased, and by being made to feel its diseased condition it makes an effort to evacuate its foul contents. The stomach may thus be excited to vomiting by the use of medicines that are not in the least degree deleterious, and taken by one whose stomach is either in a healthy or a very insensible condition, will not occasion the least degree of nausea; and if taken freely every day would not prove injurious to the stomach, nor even derange the appetite. Lobelia, the best of all emetics, does not possess poisonous or de-

leterious qualities, and doubtless occasions vomiting partly by increasing the sensibility of the stomach. Antimonial wine, tartar emetic, and sulphate of zinc are poisonous, and when taken into the stomach nature makes an effort to cast off the offending substance by the act of vomiting. Thus by one plan of treatment we aid the stomach, whereas by the other the stomach is aggravated and its functions deranged.

Cathartics are agents which do not harmonize with the laws of life, and when taken into the stomach the constitution makes an effort to remove the offending substance by purging. The deleterious influence of cathartics provokes the bowels to action upon the same principle that a portion of tainted meat will produce looseness of the bowels and violent purging.

It is urged by some that many diseases pass off with a looseness of the bowels and that nature sanctions the propriety of purging.—But it should be borne in mind that the forced action from a cathartic is different from the action which results as a consequence of the bowels *recovering* their functions at the crisis of disease. In the first case the bowels are aggravated and provoked to action, whereas in the latter it is the recovery of their lost functions.

Some have endeavoured to prove the advantage of using cathartics by selecting a few isolated cases, where especial benefit appeared to result from their employment, the medicine having been given at a favourable period of the disease. Thus a patient may have several courses of medicine administered, which may bring the disease almost to a crisis, and just at this time take a dose of cathartic medicine, and the next day the disease be broken up, not in consequence of having taken a purge, but because the disease was forming a crisis when the cathartic was taken, and although it does more harm than good, still the disorder being just at its termination the patient would improve more rapidly, and very erroneously suppose that he had received more benefit from the cathartic than from courses of medicine.

I have known patients relieved of rheumatic pains by being freely purged with powerful cathartics; but I have never yet seen a patient really benefited, or the cause of disease removed by such treatment.

A physician may obtain a large practice, whose course of treatment may in every instance be detrimental to the recovery of his patient, *nature* still struggling against the disease and the treatment, health becomes restored, and the doctor receives much credit for his *skill!* more especially where a patient recovers who has been nearly deprived of vitality by his treatment.

There are thousands of persons in the community who continue in bad health year after year, in consequence of the habitual use of purgative medicines. After commencing the use of purgatives the bowels being weakened by them, they become more costive; to overcome this, more physic is taken, which may relieve, but it weak-

ens digestion, and is followed by increased torpor of the bowels.—I have frequently conversed with persons who had been in the habit of taking a dose of purgative medicine regularly once a week or oftener, and had continued in this practice from five to fifteen years; the bowels finally becoming so torpid as scarcely ever to be moved except provoked by the irritating effects of a cathartic; whereas if no purgatives had been used, many of these patients might have enjoyed good health.

The exclusion of cathartics constitutes one of the distinguishing features of the Thomsonian practice of medicine, and no one can justly claim the title of Thomsonian who is in the habit of prescribing either *mineral* or *vegetable* cathartics. It is inconsistent to denounce all *mineral* poisons, and at the same time administer vegetable poisons, such as *mandrake*, an article which has been laid aside by the medical profession generally as too irritating to be used with safety; and yet many who claim to be Thomsonian doctors employ mandrake to a great extent in their practice. Castor oil, which is one of the mildest cathartics, occasions purging, because it is indigestible and offensive to the stomach and bowels.

I once heard Dr. Samuel Thomson make the remark, that the practice of taking physic (purgatives) was like borrowing from Peter to pay Paul—which may afford some relief, but does not diminish the debt. In like manner a dose of purgative medicine may afford relief, but it does not remove the cause of disease.

In disease that comes on suddenly, more especially when, attended by fever, frequent changes in the symptoms and aspects of the disease take place, effected by the efforts of nature, which are apt to be attributed to medicine that has no other effect than to retard the curative efforts of the constitution. A professor in Jefferson college being called out in the country, in consultation, was told by the country physician that he found his patients who had remitting fever to bear purging so badly this season, 1842, that he had ceased to employ cathartics altogether, and that some of his patients had gone 14 days without a passage from the bowels. Laying aside cathartics was certainly correct, but why the doctor did not recommend enemas, appears somewhat singular.

In treating cases of constipation of the bowels, even of long standing, I have in many instances been agreeably disappointed by finding the natural action of the bowels to be in a great measure restored in the course of from two to four weeks under a course of treatment in which no purgatives were used.

In certain conditions of the stomach and bowels, for instance, when they contain a portion of acrid secretions, the use of medicine that possesses no cathartic properties may be followed by purging.—Thus cayenne pepper or composition powder, taken freely when the bowels contain a superabundance of acids, will increase the sensibilities of the mucous membrane, and may cause the acid or acrid

secretions to operate as a purgative. But by continuing the use of composition or pepper until the acid is removed, the medicine may be taken in increased quantities and no cathartic effect will be produced. In like manner a dose of purgative medicine may be made to operate by giving stimulants to increase the sensibility of the bowels to the morbid impression of the cathartic, and stimulating the restorative efforts of nature to cast off the deleterious substance.—Cayenne does not therefore possess cathartic properties, its use is never followed by purging except there be acrid secretions, or some deleterious substance in the bowels.

A deficiency of bile, in consequence of want of action in the liver, is a very common cause of costiveness, and under these circumstances cathartics are decidedly injurious.

The object to be kept in view in the treatment of disease is to aid the efforts of nature; "to husband the resources of the constitution," in order that lost action may be restored. Nature has established certain methods for removing disease, and for regaining her lost power, and the use of medicine or other employment of means that do not harmonize with these curative actions, though they may change the symptoms and procure relief, still the designs of *nature* will be frustrated, and her energies crippled. In illustration of what I have here asserted, I will suppose a patient who is sick of what is termed bilious fever, to be left entirely in the hands of nature, except so far as to take simple warm teas and be protected from all injurious influences.—Watching the progress of the case, we find the fever continuing without any abatement, except at short intervals in the morning; the tongue becomes even more thickly coated, the bowels remain costive, and all the symptoms continue, without any perceptible change for several days, but finally the tongue begins to clean along the edges, the fever abates, perspiration ensues, the appetite returns, and the function of the bowels is restored. Now, under such circumstances, by what method is disease removed? It is by the constitution "husbanding her resources"—retaining the heat by which these actions are sustained, which resist the influence of the causes of disease, and by which the secretions and all other functions are fully restored. Now suppose such a case be placed under the treatment of a physician of the old school practice, and active cathartics given, causing a free operation upon the bowels, would this restore the lost function of the bowels? No: it would aggravate the bowels and drain the system of a portion of its strength. In this way, by frequent purgation and blood-letting, disease is in many instances prolonged to four or five weeks' duration, which, if left in the hands of nature alone, would have found a crisis in less than two weeks and the patient subjected to much less suffering.

There are means, however, by which *nature* may be assisted,

the duration of disease shortened, pain relieved and life prolonged. To Dr. Samuel Thomson are we indebted for the detection and exposition of the errors of the regular practice of medicine; the discovery of the true principle of medical science; and the introduction of a system of practice which does not clash with *nature's efforts*, but operates in harmony with life; and when properly applied will prove the most speedy and effectual means of restoring health that has ever been introduced.

It has been urged as an objection to the Thomsonian practice that all diseases are treated alike, or that the same remedies are used in all cases. The fact that Thomsonians treat disease upon general principles, without regard to the name of disease, is in reality a strong point in favour of its correctness. Thus a thousand different forms of disease may be produced by one general cause, and that course of treatment that will assist nature in one form of disease will do it in another. And again, the same course of treatment that will cleanse the stomach when it has become disordered by exposure to cold, will also do the same when disordered through inaccuracies in diet, dissipation, loss of rest, exposure to foul air, &c. &c. &c.

INJECTIONS OR ENEMAS.

Many important objects may be accomplished by the use of injections in cases of sickness; and in many instances they constitute the most important means for the cure of disease.

In disease, the bowels are generally either constipated or affected with diarrhœa, and in either case the use of injections, though not always necessary, may nevertheless be employed with advantage. The mere evacuation of the fecal contents of the bowels, is not of so much importance in the cure of disease as is generally supposed. To restore healthy action in the bowels is the great object to be kept in view; and it is better that a patient submit to some unpleasant feelings from costiveness than to harass his stomach and bowels by taking cathartics.

When aliments leave the stomach, they pass quickly through the small intestines, a distance of about thirty feet in a liquid state, and when received into the large intestine are there retained to undergo a kind of second digestion. Hence the seat of costiveness in almost every instance is in the lower bowels, and within the reach of the influence of injections.

"Whatever is good to cure disease when taken into the stomach, is likewise good for the same purpose given by injection, as the

grand object is to warm the bowels and remove canker. In all cases of dysentery, cold, piles, and other complaints, where the bowels are badly affected, injections should not be neglected. They are perfectly safe in all cases, and better that they be used ten times when not needed than once neglected when they are. In many violent cases, particularly where there is danger of mortification, patients may be relieved by administering medicine in this way, when all other means would fail."—*Dr. Samuel Thomson.*

Lobelia administered by injection and retained, operates upon the general system, as effectually as when taken into the stomach. Indeed a greater degree of relaxation may be effected by the same quantity of lobelia administered by enemas than when taken into the stomach. Often I have observed a most striking change for the better produced in violent attacks of disease by a lobelia injection retained. Obstruction in the system, wherever situated, appears to be more effectually removed by relaxing the system with lobelia than by any other means. Not that we are to depend, however, upon this treatment, to the exclusion of the use of stimulants, the vapour bath and emetics. There is probably no medicine so effectual in arousing the sensibility of the bowels as lobelia —causing the patient to feel his diseased condition; and by exciting the disease expelling power into action, distress in the bowels will be experienced, followed, however, in all curable cases by a manifest and frequently remarkable change for the better.

Of the various methods of preparing Injections; together with further remarks in relation to their practical application.

Half a pint of warm composition tea, adding a teaspoonful of green lobelia powder, forms a suitable injection for ordinary cases of disease, where the symptoms are not of a dangerous or violent character, nor the bowels badly disordered.

When there is reason to believe that the bowels are "cankered" or coated with thickened tenacious secretions or a false membrane, as they are in dysentery, diarrhœa, and in obstinate cases of disease of every description, the following form of injection will prove more effectual than the one before mentioned, namely:

Half a pint of bayberry or No. 3 tea, made very strong, and after it is strained or settled and poured off, add a large teaspoonful of the liquid of the third preparation of lobelia, or a teaspoonful of No. 6, and a teaspoonful of either brown or green lobelia powder.

In violent cases the quantity of third preparation, or of the pepper and lobelia, must be increased to double or treble or even to ten times the quantity above mentioned. Thus in malignant forms of disease, as in what are termed typhus or congestive fevers, I have generally found it necessary to administer a large tablespoonful of

the third preparation of lobelia at a time by injection, and have it repeated every two or three hours for several days in succession, in order to sustain vital action, and prevent mortification. I have known patients to recover from malignant forms of disease chiefly I believe through the influence of actively stimulating injections, administered every hour or two, and in this way continued from one to four or five days. In some of these cases the sensibility of the bowels was so low that from four to six injections would be retained, before an operation was effected or the bowels made sensible to the impression.

The daily use of stimulating injections during "*confinement*" after child-birth, will prove an effective preventive againt puerperal or child-bed fever, as it promotes the contractile power of the uterus and prevents stagnation of blood in the uterine vessels—a frequent cause of puerperal fever. It may be asked, will not lobelia injections relax the uterus. If there should be spasmodic contraction of the uterus the use of lobelia will overcome the spasmodic contraction, but at the same time will promote the power of healthy contraction; just as in a case of spasm of the neck of the bladder, lobelia injections while it relaxes the spasm increases the expelling power of the bladder.

By observing the character of the evacuations from the bowels during the course of disease, we perceive that about the time that a favourable crisis takes place there will be more or less of a skinny-like substance escaping from the bowels, and which had previously coated their mucous membrane. To remove this substance from the lower bowels, (where it is chiefly situated) the use of injections are particularly indicated. Thus, long-standing cases of dyspepsia are cured by the removal of a false membrane from the stomach and bowels, by means of courses of medicine and taking freely of composition powder, or of bayberry and pepper, together with the daily use of an enema. Powerful purgative medicines, though they may sometimes bring away false membrane, when not too firmly adherent, yet as they neither restore the lost functions of the bowels nor establish healthy secretions, the bowels will consequently become more "cankered" by the use of cathartics; whereas under Thomsonian treatment the same course of treatment that removes "canker," restores the functions of the bowels, and promotes healthy secretions.

In cases of obstinate costiveness, and where the chief object is merely the evacuation of the bowels, the following will be found sometimes to answer a better purpose than those already mentioned.

A tablespoonful of salt,
Do. do. molasses,
And a pint of warm water.

This may be rendered more effectual by the addition of a teaspoonful of the third preparation of lobelia, or of the lobelia powder.

Simple Astringent Injections.—In bad cases of piles, the powerful stimulating injections should not be employed except under some peculiar circumstances, for instance, in paralysis of the lower extremities, or of the bladder, or rectum, suspended animation, or, in cases of extreme prostration from illness. When a patient is affected with piles, and ordinary injections are found to make the piles worse, I have never found any plan of treatment more effectual than a strong tea of witch hazel, sumac berries, bayberry, or poplar bark, used by injection at bed-time, and retained until morning. This diminishes the piles, relieves the soreness of the parts, and generally procures a motion from the bowels in the morning.

Simple Lobelia Injections.—Immense benefit may very often be derived by placing the system under the influence of lobelia, administered by injection, and retained ten or fifteen minutes; and, indeed, no harm will arise from it, even though it should remain in the bowels many hours. In all violent attacks of disease, one of the most important indications is to relax the system by lobelia, either taken into the stomach, or administered by injection in lukewarm water. If stimulants are employed in the injection, the lobelia will pass off before the system will be effectually influenced by it. In violent cases of croup, besides giving lobelia by the mouth, half a teaspoonful of the powder in a tea cup of lukewarm water should be administered by injection, and this repeated if the case prove obstinate of cure. In severe cases of scarlet fever, attended with an undue determination of blood to the head, and, in fine, whenever there is vehement fever, attended by a hard and tense pulse, injections of lobelia powder in lukewarm water, by relaxing the system, will very greatly assist the efforts of the constitution to overcome obstructions, and restore the functions of the bowels.

In administering lobelia to infants and children, by injection, the quantity used must vary, to suit the age of the patient, and the violence of the disease. Thus, for children under one year old, as much lobelia powder as will lay on a five cent piece, or even less than this will be sufficient in ordinary cases. But when the symptoms are violent, as in severe croup, fits, &c., a much larger quantity may be required.

The practice of placing the system under the influence of lobelia, administered by injection and retained, is not to be confined exclusively to cases in which there is a high fever. Disease that has

become seated, whether accompanied with fever or not, has often been removed by means of lobelia injections.

Case.—Some months since, a daughter of my brother was taken with a sore mouth of an extremely distressing character, and various kinds of remedies, together with the use of the steam bath, and the usual stimulating injections, having failed to effect a favourable change in the symptoms, and the disease having continued nearly two weeks, a lobelia injection was administered and retained, which relaxed the system very much, aroused a new action in the bowels, occasioning considerable pain and distress for a time, but the symptoms of the sore mouth at once assumed a more favourable aspect, and in a short time it was well.

Lobelia retained in the bowels will always produce for a time more or less pain and distress, by greatly increasing the sensibility of the parts, and, as it were, attracting the nervous influence to the bowels, removing obstructions, and restoring their lost functions. Patients may be effectually vomited by lobelia administered in the manner just described; the vomiting and relaxation of the system even continuing longer than when an emetic is taken in the usual way.

In all cases of obstinate obstructions in a part, attended with violent pain and strong pulse, as in severe pleurisy, inflammation of the brain, inflammation of the lungs, croup, &c., lobelia should be used freely, either given by the mouth, or administered by injection and retained. In some instances it will be necessary to repeat the injections at intervals of every four or five hours, with a view to overcome obstructions if there be seated inflammation; to equalize the circulation of the blood and of nervous power. In this way we obtain all the benefits that can possibly result by relaxing the system by blood-letting, and without any danger of the serious consequences which not unfrequently result from the loss of blood.

Lobelia administered by injection, exerts a more prompt and effective influence upon the kidneys, bladder, and uterus, than when taken into the stomach. Hence, in all cases of disease of any of these organs, or in parts within the vicinity of the lower bowels, the use of injections will constitute a very essential part of the treatment. Flooding after child-birth can be more effectually and promptly checked by stimulating injections, containing lobelia, administered to the bowels, than by any other means.

Violent inflammation of the kidneys, strangulated hernia, inflammation of the neck of the bladder, retention of urine, painful stricture of the urethra and inflammation of the uterus, demand the prompt employment of lobelia injections, besides the usual constitutional treatment proper to be employed in such cases.

Habitual costiveness is rarely cured by the use of ordinary injections alone; other means must be employed, as the circumstances of the case require. Sometimes a free use of cayenne pepper at meals will restore the natural action of the bowels.

In administering a course of medicine in deeply seated disease, no matter by what name it may be called, it is a good practice to administer a stimulating injection previously to the steaming, and after the bath, repeat the injection composed simply of half a teaspoonful of lobelia powder in warm water, so that it may be retained, and then give the emetic of the third preparation of lobelia, or some other preparation of lobelia, combined with stimulants in bayberry tea.

I attended a lady at Moores Town, N. J., who continued nine days without any motion from the bowels, notwithstanding injections were administered daily. She experienced no apparent inconvenience from the constipation of the bowels, and being in a state of extreme prostration, this patient would probably not have recovered, if her stomach and bowels had been aggravated by cathartics, or even by laxatives, the mere stimulus of distention arising from the presence of fœcal matter in the bowels, assisting in supporting the strength of the patient.

Turpentine administered by injections, has frequently proved successful in removing the pain in cases of bilious colic. Take a tablespoonful of oil, or spirits of turpentine, and the yolks of two eggs; beat them well together, and then add a pint of warm water. This may be all administered at a time, and repeated if necessary.

Tonic Injections.—A decoction of Peruvian bark, rose willow, poplar, or of any of the vegetable tonics, administered by injection and retained, will exert the same influence upon the system as when taken into the stomach. Tonics may be administered in this way in cases where the stomach is too irritable to retain tonic medicines.

THOMSONIAN MATERIA MEDICA:

CONTAINING

A GENERAL DESCRIPTION

OF THE

MEDICAL PROPERTIES AND USES

OF THE

VARIOUS MEDICINES AND COMPOUNDS

EMPLOYED IN THE

THOMSONIAN PRACTICE.

LOBELIA INFLATA—EMETIC HERB.

There are several species of lobelia, none of which, however, except the *inflata* appears to possess medical properties of sufficient importance to entitle them to a place in the materia medica. The *Lobelia inflata* presents several peculiarities by which it may very readily be distinguished from every other plant. It grows in every kind of soil, but is to be found most plentifully in old pasture fields, and in fields that have been in grass a year. Lobelia does not come to maturity the first year of its growth. It is a *biennial* plant, rising but very little above the surface of the ground during the first summer, and on the following one it blossoms and seeds. The lobelia pods or capsules are very easily distinguished from those of any other plant.

No one except Dr. Samuel Thomson has any just claims to the discovery of the medical virtues of lobelia. This like many of the most useful discoveries that have been made, was the result of accident. Thomson during a period of twenty years, commencing with early boyhood, had often observed the singular effect of lobelia upon persons by chewing a small portion of the plant, before it occurred to him that it possessed any valuable medical properties. The small quantity generally taken, and the persons that took it being in good health, affords an explanation why the medical vir-

tues of lobelia so long escaped the discriminating mind of Thomson. The idea of its being useful as medicine, originated from observing its powerful effects upon a man who had swallowed some in bad health. The man became very much relaxed, vomited freely, sweat profusely, and in a short time after ate a hearty dinner, and declared that he never had any thing to do him so much good.—This circumstance induced Samuel Thomson to make a trial of it for cleansing the stomach, which resulted in the conviction that it possessed important medical properties—that it was powerful in removing disease, and harmless to the system.

"In giving a description of this valuable herb," (says Samuel Thomson,) "I shall be more particular, because it is the most important article made use of in my system of practice, without which it would be incomplete, and the medical virtues of which, and the administering of it in cases of disease, I claim as my own discovery. The first knowledge I ever had of it was obtained by accident more than forty years ago; and I never had any information whatever concerning it, except what I have gained by my own experience. A great deal has been said of late about this plant, both in favour and against its utility as a medicine; but all that the faculty have said or published concerning it, only shows their ignorance on the subject; for there is very little truth in what they have stated concerning its medical properties, except wherein they have admitted it to be a cure for the asthma."

The powerful effect produced upon the system by the use of lobelia, more especially where there is much disorder, has doubtless induced many to believe that it is poisonous. The assertion, however, that lobelia is a poison is not true; "but on the contrary," as Dr. Thomson very justly observes, "there is no vegetable that the earth produces more harmless in its effects on the human system, and none more powerful in removing disease and promoting health."

"I am confident," ("observes Professor Tully, of Yale College,) "the old woman's stories in the books to the contrary notwithstanding, that lobelia is a valuable, a safe, and a sufficiently gentle article of medicine; and I think the time will come when it will be much better appreciated. Little, however, of its value can be specified within the compass of a single sheet of paper."

The great majority of medical men have set their faces against lobelia, and the Thomsonian practice, in general, with a degree of prejudice and stubbornness, which reflect no credit upon the profession. At the trial of Dr. Frost of New York, and on other occasions where regular physicians have given testimony before "courts of justice," in relation to the properties of lobelia inflata, their evidence has been based upon the information they had obtained from medical authors who knew as little as themselves of its properties from experimental observation.

I have used lobelia extensively during nine years, most of this time having had a large practice, and I am fully confirmed in the belief that all that Samuel Thomson has said concerning the properties of lobelia is *true*. The longer I use it the more reason I have to prize it above all other medicines. This simple herb which may be found in every kind of soil, and on the top of hills and in valleys, contains medical properties not possessed probably by any other substance, either mineral or vegetable. The powerful influence it exerts on the system, and the many important indications which its use fulfils in the cure of disease, justly entitles it, in point of medical virtue, to be placed at the head of medicinal agents.

Lobelia operates as a pure and powerful stimulant to the great sympathetic system of nerves, which control the functions of the stomach, bowels, and all the internal organs. Under its stimulating influence the stomach and bowels are made to feel their diseased condition, the vital powers are concentrated there to the seat of disease, the restorative efforts of nature are called into action to expel disease, and during this conflict of the restorative efforts of nature against disease, patients frequently experience distress and pain in the stomach and bowels, the system becomes relaxed, to such a degree in some cases that the patient thinks he is going to die—a feeling persons often experience during sea-sickness. Some have spasm of the muscles of the arms and hands, the fingers becoming stiff, accompanied with a feeling of numbness. I attended a young lady from New Orleans, who always had hysteric spasms when under the operation of a course of medicine. Distressing as it sometimes is to have the system fully under the powerful action of lobelia, yet those who suffer most are generally so much diseased, that nothing short of this thorough course of treatment can be relied upon. The operation is safe, and mostly compensates the patient fully, for all the distress occasioned at the time.

"When this medicine is given to patients that are in a decline, or are labouring under a disease of long standing, the symptoms indicating a crisis will not take place until they have been carried through from three to eight courses of medicine; and the lower they have been the more alarming will be the symptoms. I have seen some who would lay and sob for two hours like a child that had been punished, not able to speak or to raise their hand to their head, and the next day be about and soon get well. In cases where patients have taken considerable opium, and a course of medicine is administered, it will, during the operation, produce the same appearances and symptoms that are produced by opium when first given; the opium having lain dormant is roused into action by the enlivening effects of the course of medicine, and they will be thrown into a senseless state; the whole system will be one

complete mass of confusion, the patient tumbling in every direction; will require two or three persons to hold them in bed; they grow cold as though dying; remaining in this way from two to eight hours, and then awake like one from sleep after a good nights' rest, and become entirely calm and sensible as though nothing had ailed them. It is seldom that they have more than one of these turns, as it is the last struggle of the disease, and they generally begin to recover from that time. I have been more particular in describing these effects of lobelia in particular cases, where disease is deeply seated, as they are very alarming to those unacquainted with them, in order to show that there is no danger to be apprehended, as it is certain evidence of a favourable turn of the disease."—*Dr. Thomson.*

Preparations of Lobelia.

Green Lobelia powder.—To prepare green lobelia powder the herb should be gathered when in blossom; dry it in the shade, and as soon as it is thoroughly dried, strip or beat off the leaves and pods, reduce it to a fine powder, and keep it secluded from the air, dampness and from light. This forms the *green lobelia* powder. This preparation of lobelia is generally employed as an emetic in ordinary cases of disease, and for children in general. It is usually given in strong composition tea, or in a strong decoction of bayberry or sumac, adding a portion of cayenne or of No. 6.

The green lobelia powder is not as efficient an emetic as lobelia seed pulverized, and, therefore, in severe cases the latter is to be preferred. In severe cases when it is proper to relax the system fully as in violent attacks of fever, pleurisy, inflammation of the lungs, violent pain, strangulated hernia, &c., the pulverized lobelia seed should be employed. General directions for preparing emetics will be found under the head of courses of medicine.

Tincture of Lobelia.—To prepare a tincture of lobelia, take the freshly dried herb in any stage of its growth, before the leaves become yellow and put it in alcohol, whiskey, or in maderia or sherry wine.—Tinctured in *vinegar* it is a worthless preparation. The tincture is a convenient form of administering lobelia to children as an expectorant in whooping cough, and affections of the breast in general. Ordinary attacks of croup may be cured by giving promptly and freely of the tincture of lobelia. As an emetic, the lobelia powder or the third preparation is to be preferred to the tincture; but when it is desired to place the system under the influence of lobelia in a moderate way, as in cases of tight cough, disease of the chest in general, dyspepsia, palpitation of the heart, scrofula, and in fine, in a great variety of cases of disease, the use

of the tincture of lobelia forms a very convenient and useful preparation, given to an extent to produce a slight degree of nausea. I have observed the use of the tincture of lobelia taken in doses of from half a teaspoonful every hour or two, to be attended with very great benefit in very many cases of dyspepsia, consumption, and in diseases of the breast in general.

Tincture of lobelia forms a substitute for the various kinds of anodynes in general use, such as Godfrey's Cordial, Paragoric and other preparations containing opium. Given to infants and children in small doses, varying from five to twenty drops, it quiets restlessness, and disposes to sleep. Administered in this way lobelia has a soothing influence upon the system. Lobelia is not narcotic, it possesses no such properties.

Taken in small doses by those who are attending upon the sick the tincture of lobelia will be useful in protecting the system from disease.

Lobelia Seed.—To obtain lobelia seed the herb should be collected when the pods have turned yellow. If left until the capsules are fully ripe and dried, the pods being open at the top the seed will fall out unless great care be taken in gathering.—To prepare the seed for use, they must be finely pulverized in a mortar or by grinding.

The lobelia seed exerts a much more powerful influence upon the system than the green powder, or the tincture. The *alarming symptoms*, as they are so called, are seldom produced by the use of any other preparation of lobelia than the seed. A free use of the brown lobelia will rarely fail of relaxing the system; and as this is a point of great importance in the cure of disease attended with high fever or violent pain, the brown lobelia powder should be employed, or at least a portion of it combined with the green powder. In cases of strangulated hernia; inflammation of the kidneys, bladder, or uterus; peritoneal inflammation; stranguary; apoplexy; violent fever, such as often attends scarlet fever; severe cases of rheumatism; locked jaw; violent cramp in the stomach; severe cases of croup; St. Vitus' dance; palsy; painters' colic; severe forms of pleurisy and inflammation of the lungs; dropsy of the chest; and in bleeding from the lungs, administering a portion of brown lobelia powder by injection so as to be retained, constitutes a most important part of the treatment. We are not to depend, however, upon this alone. In treating disease, in general, there are several important objects to be kept in view in regulating the treatment. These are to restore the natural temperature of the blood; equalize the circulation; remove obstructions; excite vomiting; sustain the restorative actions; promote perspiration, and other secretions; cleanse the stomach and bowels of "canker;" and assist digestion. The means and remedies to be employed to fulfil

these indications, are—the vapour bath; pure stimulants, as capsicum and composition, lobelia emetics prepared as directed under the head of a course of medicine; broken doses of lobelia, injections of lobelia retained; bayberry or other of the No. 3 or anti-canker medicine; and lastly, bitters.

Third Preparation of Lobelia.

Directions for Preparing.—Take an ounce of lobelia seed pulverized; an ounce of cayenne pepper; and an even tablespoonful of nerve powder. Mix them together, and add between half a pint and a pint of No. 6. To be kept in vials or bottles tightly corked, and not allowed to remain in a hot place. This preparation given in strong bayberry or No. 3 tea, forms an efficient emetic. It is a powerful agent for assisting nature to overcome disease, and may be used with perfect safety. The dose is from a teaspoonful to a tablespoonful, to be repeated as the circumstances of the case may demand. I knew an instance where a child but nine months old, took three ounces of the third preparation of lobelia during one afternoon. It was a case of croup, which had continued two or three days, before this thorough treatment was adopted. The patient recovered through the agency of the treatment.

The third preparation of lobelia is particularly adapted to violent attacks of disease, as in fits, bilious colic, cholera morbus, locked jaw, poisons taken into the stomach, suspended animation from drowning, lightning, or from inhaling carbonic acid gas; difficult cases of croup, and asthma; gout, palsy, and in all cases of violent pains and inflammation in the kidneys, bladder, &c. An effectual plan of treating violent attacks of disease is, to administer lobelia powder by injection to be retained, and giving the third preparation by the mouth.

In preparing emetics for adults I generally combine the third preparation and lobelia powder. In all cases where the strength of the system is in a sunken condition, in protracted fevers, malignant small-pox, measles and scarlet fever, where the eruption is slow in appearing for want of vital action, or where there is a tendency to a retrocession or striking in of the eruption, the use of the third preparation of lobelia is particularly indicated.

In many cases, for instance in fevers where the patient is very low, the third preparation of lobelia may be taken in teaspoonful doses repeated every hour or two and continued a day or even longer, without occasioning vomiting. If it should not cause vomiting, however, it need not occasion the least degree of anxiety, as it can do no harm under any circumstances.

To sustain vital action, and prevent mortification in malignant forms of disease, for instance, in the advanced stages of what are

called fevers, there are no means more effectual than the free use of the third preparation of lobelia in the stomach and administered by injection. The quantity to be used must be regulated by the effect produced. In some instances I have found it necessary to use a tablespoonful or more in an injection, and this repeated every two or three hours, and continued several days and nights in succession, and with the most happy effects, especially in low forms of fever.

In treating of the third preparation of lobelia, Dr. Thomson observes:—"This preparation is for the most violent attacks of disease, such as locked jaw, bite of a mad dog, drowned persons, fits, spasms, and in all cases of suspended animation, where the vital spark is nearly extinct. It will go through the system like electricity giving heat and life to every part. In cases where the spasms are so violent that the patient is stiff, and the jaws becomes set, by pouring some of this liquid into the mouth between the cheek and teeth, as soon as it reaches the glands at the root of the tongue, the spasms will relax, and the jaws will become loosened so that they will open; then give a dose of it, and soon as the spasms abate, repeat it and afterwards give a tea of No. 3 for canker.—This course I never knew to fail of giving relief. It is good in less violent cases to bring out the measles and small pox." * * * * * * I have cured three dogs with this preparation, who were under the most violent symptoms of hydrophobia; and one of my agents cured a man with it who had been bitten by a mad dog; and I have not the least doubt of its being a specific for that disease."—*Dr. S. Thomson.*

I have never known of a patient being suffocated by having the third preparation of lobelia poured into the mouth, even where the patient was in a state of unconsciousness at the time.

In giving the third preparation as an emetic and on ordinary occasions, it should be given in bayberry or No. 3 tea, made very strong.

Externally applied, the third preparation of lobelia, will prove beneficial in cases of rheumatism, lumbago, palsy, erysipelas, asthma, weakness of the spine, pain in the side, dropsical swellings, chronic pleurisy, chilblains, some species of tetter, and in tic-doloureux.

Compound Lobelia Pills.

Directions for making.—Mix equal portions of pulverized lobelia seed and cayenne pepper, and about one-fourth the quantity of finely pulverized gum Arabic; and sufficient water to form the mass into a proper consistency to be formed into pills. Liquorice dissolved in water to the consistence of molasses; mucilage of elm;

or honey may be employed in place of gum Arabic in making the pills.

The compound lobelia pills may be used as a general medicine where patients prefer taking them to liquids. They are particularly adapted to cases of dropsy, as the desired impression may be made by medicine, without the use of liquids. Where a disease has become seated, as in dyspepsia, rheumatism, gout, asthma, tetter, scald-head, consumption, costiveness, jaundice, St. Vitus's dance, piles, palsy, neuralgia, scrofula, &c., these pills may be employed in the place of the stimulating teas; and as intermediate medicine where courses of medicine are given. The use of these pills will in many instances occasion more or less uneasiness and pain in the bowels, until a more natural warmth and action are restored to the bowels, and then they will cease to produce pain unless taken in large quantities.

The use of these pills promote the natural action of the bowels. They possess no cathartic properties. If there be a great accumulation of acid in the bowels, a free use of these pills may cause the acid to be more sensibly felt, and produce purging. In the same way a dose of cathartic medicine may be made to operate more quickly by increasing the sensibility of the mucous membrane of the bowels by stimulants.

Finally, the compound lobelia pills may be employed as a general medicine in all kinds of complaints, until the disease forms a crisis and the condition of the patients require the use of tonics. They occasionally cause great relief by exciting free vomiting, more especially when the patients stomach is very foul. They can do injury under any circumstance.

Dose.—In case of rheumatism, dropsy, &c., when it is proper to place the system under the continued influence of medicine, from two to four pills may be taken about every hour or two. In ordinary cases of dyspepsia and costiveness, from two to four or five of the pills may be taken at bed-time.

STIMULANTS

Which raise and sustain vital action, and assist the efforts of nature to remove disease.

CAPSICUM—CAYENNE PEPPER.

"Numerous species of capsicum, inhabiting the East Indies and tropical America, are enumerated by botanists, the fruit of which differing simply in the degree of pungency, may be indiscriminately employed. The capsicum *baccatum*, or bird pepper, and the capsicum *frutescens*, are said to yield most of the cayenne pepper brought from the West Indies and South America; and Ainslie informs us that the latter is chiefly used in the East Indies. The species most extensively cultivated in Europe and this country, is that recognised as officinal by the pharmacopæs, namely: the *capsicum annuum*. The first two are shrubby plants, the last is annual and herbaceous."—*U. S. Dispensatory.*

Capsicum is a pure and permanent stimulant, its direct effect upon the system, when taken, is to raise and support vital action, it restores a natural warmth to the system, increases the power of generating nervous influence, by which the secretions are increased, a determination to the surface is produced, and the circulation of the blood equalized. Cayenne pepper, therefore, is an important agent in the treatment of disease, always assisting nature and operating against disease, whether it be attended by chilliness or fever. It is congenial to the living principle in man as certainly as that the sun is congenial to the life of the vegetable kingdom.

The greater part of the cayenne pepper sold by grocers and apothecaries, contains very little strength, and therefore should not be used as medicine.

The American pepper, though inferior in strength to the imported, will answer in ordinary cases of disease, provided it be properly dried and prepared. The African pepper, however, is always to be preferred when it can be obtained pure.

Large quantities of damaged capsicum are landed in our seaport towns, so that the greatest degree of circumspection is necessary in purchasing the article. Those who deal largely in Thomsonian medicines should either purchase the article in the pod so that they may know its qualities and have it ground under their own inspection, or purchase it of those who are a judge of the article and have it ground in mills where no poisonous drugs are allowed to enter.

"I shall not," (says Dr Thomson) undertake to dispute but that *cayenne* had been used for medical purposes long before I had any knowledge of it; but it is equally true that the medical faculty never considered it of much value, and the people had no knowledge of it as a medicine, till I introduced it by making use of it in my practice. That it is one of the safest and best articles ever discovered for the removal of disease, I know to be a fact from long experience. Mention is made of cayenne in the Edinburgh Dispensatory, as chiefly employed for culinary purposes, but that of late it has been employed in the practice of medicine. The author says, "there can be little doubt that it furnishes one of the purest and strongest stimulants which can be introduced into the stomach; while at the same time it has nothing of the narcotic effects of ardent spirits. It is said to have been used with success in curing some cases of disease that had resisted all other remedies." "All this," (observes Thomson) "I am satisfied is true, for if given as a medicine, it will always be found useful; but all the knowledge they had of it seems to have been derived from a few experiments that had been made, without fixing upon any particular manner of preparing or administering it. * * * * * * * * * *

"When I first began to use this article," (says Thomson) it caused much talk among the people of Portsmouth and the adjoining towns; the doctors tried to frighten them by telling them that I made use of cayenne pepper as a medicine, and that it would burn up the stomach and lungs as bad as vitriol. The people generally, however, became convinced by using it, that all that the doctors said about it was false, and thus proved their ignorance of its medical virtues, and that in making these assertions they were influenced by a feeling of malice towards *me*. It soon came into general use, and the knowledge of its being useful in curing disease was spread all through the country. I have made use of cayenne in all kinds of disease, and have given it to patients of all ages and under every circumstance that has come under my practice; and can assure the public that it is perfectly harmless, never having known it to produce any bad effects whatever. It is doubtless the most powerful stimulant known, it is congenial with nature, having a direct tendency to raise and maintain the natural heat of the system upon which life and health so materially depend. It is extremely pungent and when taken sets the mouth, as it were, on fire; this lasts, however, but a few minutes, and I consider it essentially a benefit in many cases as it causes a free flow of saliva from the glands of the mouth and throat."

An important object to be kept in view in the treatment of disease of every variety, and in every stage, is to assist the efforts of nature by the use of stimulants. And the use of cayenne pepper, although not necessary in every case of disease, may still be given with safety under all circumstances.

To one not fully acquainted with the effects of cayenne pepper upon the system, it may appear a strange practice to give the article in cases of fever. Singular as it may seem, it is nevertheless true, that excepting lobelia there is no other article of equal value with cayenne pepper in the cure of fevers in general. As to the declarations of physicians that the use of cayenne internally will aggravate fever, or that it will increase inflammation in the stomach and bowels, given even in large quantities, is contradicted by the experience and observation of thousands of men and women, possessed of as much common sense, and as capable of appreciating the effects of medicine as the medical profession.

Experience has proved that cayenne pepper is the best remedy known for inflammation of the throat; and where is the proof that it has not the same curative effect in inflammation of the stomach and bowels. Cayenne relieves inflammation of the stomach and bowels by exciting the secretions.

As a general rule in disease, cayenne pepper or Thomson's composition, should be used until the disorder is broken up.

In ordinary cases of colds, catarrh, mild cases of fever, recent attacks of dyspepsia, or almost any kind of ailment, not too deeply seated, the free use of cayenne pepper tea, together with particular attention to diet, and avoiding exposure, will afford sufficient assistance to nature to remove disease.

The efficacy of a free use of cayene pepper in promoting digestion no one will pretend to deny. Its use will be found beneficial even in those cases of indigestion or dyspepsia attended by extreme tenderness at the pit of the stomach. The best time to take cayenne in cases of dyspepsia is with food, or shortly after meals.

In dysentery, where most medical men, influenced by the doctrines of the schools, consider the use of active stimulants very improper, yet even in the most inflammatory form of the disease, cayenne pepper may be used not only with safety, but with especial benefit. The use of cayenne pepper is particularly indicated in cases of dropsy, jaundice, long-standing cases of tetter, costiveness, flatulency, rheumatism, and gout. In fine, it may be used with perfect safety in all cases of disease.

The utility of cayenne for the cure of scarlet fever and malignant sore throat is admitted even by the medical profession; and would they but try its efficacy in all other forms of fever, they would find it as beneficial as in scarlet fever, notwithstanding its use is contra-indicated by the popular, though false doctrines propagated in the schools of medicine. I once heard professor Revere of Jefferson college observe, that almost every one knew cayenne pepper to be one of the best remedies for an inflamed throat, "and it is impossible," said he, "for us to explain why it is not equally beneficial in inflammation of the stomach or bowels."

Cayenne pepper applied to the skin will produce redness and increase the heat of the part, and aggravate acute inflammation on the surface of the body; but when applied to a secreting surface, as the mucous membrane of the stomach or bowels, it promotes the secretions from these surfaces, and in this way relieves inflammation, and assists in bringing about a favourable termination to disease. Cases of chronic diarrhœa of long standing have been cured by using freely of cayenne pepper.

The usual dose of cayenne is from a half to a teaspoonful. It is usually taken in the form of tea, made by pouring boiling water upon the powder. Sugar may be used freely in the tea. Another way to take pepper is to mix the powder in lukewarm water. Thus prepared, it is less pungent and it is equally as efficacious as the tea.

In certain conditions of the stomach, and more especially when it is empty, taking a dose of cayenne will occasion pain for a few minutes. The pain appears to rise in consequence of a sudden development or generation of gas or wind in the stomach, the pain subsiding as soon as wind is expelled. No harm is to be apprehended, however, from pain occasioned in this way, but on the contrary, we often find that patients experience a remarkable change for the better, immediately after experiencing a severe spell of pain from taking a dose of cayenne pepper. About four years ago I prescribed medicine to a man who had been dyspeptic, and otherwise in feeble health for twenty years, and on taking the first dose of Thomsonian medicine, which consisted of a teacup half full of strong bayberry tea, and a large teaspoonful of cayenne pepper, (instead of half a teaspoonful as I had directed) he was suddenly seized with violent pain in the stomach, a cold sweat broke out, and for some time he was helpless. After the pain had subsided, he fell asleep, slept several hours, and when he awoke declared that he had not felt so well at any time for many years. The patient continued the use of the medicine and his health was soon restored.

When patients experience severe pain in the stomach, after taking a dose of pepper, warm applications—a hot brick or flannel wrung out of hot water, applied to the pit of the stomach, will generally relieve the pain. Taking pepper tea in very small quantities, frequently repeated, will seldom occasion pain, even on an empty stomach.

Combining other stimulants with cayenne, as ginger or black pepper, will render it less liable to cause pain in the stomach.

As a gargle in ulcerated sore throat, there is no remedy in point of efficacy equal to cayenne pepper. A preparation of vinegar, salt and cayenne pepper, has been a long time in high repute in

some southern countries, as a remedy for malignant sore throat, and scarlet fever.

Tonics and other medicines, are rendered more active and efficient, by being combined with a portion of cayenne.

Cayenne pepper applied *externally* is very useful in many cases, as in rheumatism, dropsy, and in all cases where the use of external stimulants are indicated. Poultices of pepper may be employed with great advantage in a great variety of cases, as in chronic rheumatism, cold abscess, white swellings, hip disease, indolent ulcers, disease of the spine, and in all cases when it is necessary to stimulate the vessels of a part by the direct application of a stimulant.

THOMSON'S COMPOSITION POWDER.

To make Composition Powder.—Take three pounds of finely ground bayberry root bark, one and a half pounds of best ginger, three ounces of cayenne, and three ounces of cloves; all finely pulverized, and thoroughly mixed and passed through a sieve.

A variety of formulas for preparing composition powder have been published as an improvement upon that of Thomson's.—Some recommend the addition of a large portion of butterfly root (asclepais tuberosa) others sassafras root; either of which, however, are comparatively useless articles, and when added to Thomson's composition powder they occupy the place of articles possessing properties of far greater efficacy, in the cure of disease.

The composition powder, made of genuine articles, is adapted to all cases of disease, and hence it forms a most important and useful medicine for general family use.

The composition, besides its stimulating qualities, contains astringent, or anti-canker properties. It may be used with safety in all cases of disease, and it is more employed by Thomsonians as a general medicine, than any other article, or compound. Indeed, the composition is so universally applicable in the treatment of disease in general, that an enumeration of the varieties of disease and ailments in which this medicine may be used with advantage, would comprise a list of almost every form of disease to which the human system is subject.

Dose.—The usual dose of composition powder is a teaspoonful scalded in a teacup, half, or two-thirds, full of boiling water, sweetened and drank warm. This is the proper mode of preparing the composition, when the patient is confined to the house, or on going to bed; and when it is desired to produce perspiration.

The following is a better way of preparing the composition for

persons exposed to the weather, namely: Take of composition powder and sugar, each, a teaspoonful, rub them together, dampened with a little water; then add a teacup half full of lukewarm, or cold water, stir it together well, and take before it settles.

A dose of composition sometimes occasions pain in the stomach, frequently nausea, and sometimes vomiting, more especially in those unaccustomed to its use, but never except the stomach be more or less disordered.

In preparing composition, even for children, it should be made strong and well sweetened; a wineglassful of composition tea, made strong, will, in general, prove more beneficial to the patient than three times the quantity if made weak.

BLACK PEPPER.

Black pepper may be used with advantage in cases of excessive vomiting, intermitting fevers, cholera morbus, flatulency, and as a substitute for the capsicum, when the latter cannot be obtained. Some practitioners combine it with Peruvian bark, in cases of ague, or intermitting fever. A strong tea of black pepper is very useful as a gargle in common sore throat. Mixed with whiskey, or vinegar, it constitutes a useful gargle in elongation of the uvula, (falling of the palate.)

Black pepper forms one of the important ingredients in the celebrated remedy for piles, called Ward's paste.

The dose of black pepper is from half to a teaspoonful of the powder, or the grains may be swallowed whole.

GINGER.

The ginger plant "is a native of Hindostan, and is cultivated in all parts of India. It is also cultivated in the West Indies, whither it was transplanted from the east."—*U. S. Dispen.*

The common ginger of the shops is obtained almost exclusively from Calcutta. The best ginger comes from Jamaica, and is usually termed Jamaica ginger, or white ginger. The superiority of the Jamaica ginger arises from the manner in which it is dried. The best roots are selected, the skin taken off, and then dried separately in the sun. The common ginger, as sold by storekeepers and apothecaries, is often deprived of almost all its strength by long keeping, and altogether unfit for medical purposes. In making composition powder, the Jamaica, or white ginger, should be used, unless the common ginger can be obtained fresh and of a good quality.

Medical Properties.—Ginger is a pure mild stimulant, and, as such, it may be employed in all cases of disease; its use can injure no one. Ginger tea forms a valuable medicine for infants and children. In fine, it may be employed as a mild stimulant in all cases of disease.

Ginger tea is much employed as a remedy for colic in infants. Its use promotes digestion and lessens the liability to colic.

In mild cases of measles, scarlet fever, small-pox, and varioloid, ginger tea may be employed as a general stimulant.

Combining ginger and cayenne in about equal portions, forms a sufficiently active stimulus for general use in the treatment of disease. Tonics may be rendered more efficient and less unpleasant to the taste by the addition of a portion of ginger.

ASTRINGENTS AND DETERGENTS.

(*Thomson's No.* 3, *or Medicine for Canker.*")

Strange as it may appear, it is nevertheless true, that one of the most important indications for the cure of disease has been, as yet, overlooked by the medical profession, namely: the removal of morbid secretions from the mucous membrane of the stomach and bowels, by the use of astringents.

The medical profession employ astringents, but they are, generally, of a directly binding nature, and prescribed with the view only of constringing, or to give tone to textures that are in a relaxed condition, as in chronic diarrhœa and passive hemorrhage.

Dr. S. Thomson, by a long course of experiments, discovered a number of articles "good for canker," as he terms it, which may be taken freely without producing costiveness. Bayberry, upland sumac, white pond lily, and wild raspberry leaves, are the articles principally employed for cleansing the stomach and bowels of morbid secretions, or "canker," and to overcome their tendency to putrefaction.

BAYBERRY.

(*Myrica Cirefera.*)

Of the articles mentioned under the head of astringents, the bark of bayberry root is the best adapted to general use as an internal remedy.

Bayberry root bark should be collected in the fall after the commencement of frost, or early in the spring before the leaves put forth. Bayberry is a very important article in the Thomsonian practice, and great care should be taken to obtain that which is good. There are large quantities of bayberry sold that have been collected in an improper season, mixed with other bark, and mouldy, and consequently possess but little, if any medical virtue. Composition powder made of such bayberry, as above mentioned, old and worm eaten ginger root, and damaged pepper, would prove a useless medicine; whereas when prepared of good materials, it constitutes one of the most valuable medicines ever compounded.

The storehouses of wholesale druggists often contain large quantities of bayberry bark wholly unfit for medicine,—being collected at an improper season, mixed with trash of various kinds, and much of the bark itself in the first stage of decay.

The best bayberry is found in a sandy soil, and near the sea. The principal Thomsonian store in Philadelphia is supplied with bayberry from the coast of New Jersey, where it is collected in the proper season.

To prepare for taking.—Bayberry and all other astringent articles, are usually taken in the form of decoction. Bayberry tea to be effectual, should be made strong by steeping the bark, either pulverized or unpulverized in boiling water. Two large teaspoonsful of pulverized bayberry powder to a teacup two-thirds full of boiling water will form a tea of the proper strength to answer the purpose for which it is generally given.

Astringent teas should never be made in an iron vessel.

A strong tea of bayberry, adding a portion of cayenne, constitutes an important medicine in the cure of disease in general. This preparation though not so much used as the composition powder, is yet more effectual in cleansing the stomach and bowels of "*canker.*" A teacupful of strong bayberry tea taken when the stomach is foul, will sometimes cause vomiting, but never unless the stomach be disordered.

As a preventive to disease, in general, there is probably nothing

better that can be taken than an occasional dose of bayberry and cayenne.

Two most important indications for the cure of disease, namely: to "support the internal heat and to overcome canker," are fulfilled by the use of bayberry and cayenne.

An emetic of lobelia prepared in a strong tea of bayberry or sumac, will operate more effectually, and at the same time occasion less sickness than when given in pennyroyal tea, or lukewarm water.

UPLAND SUMAC.

(*Rhus Glabrum.*)

The bark, leaves, and berries of sumac are employed for medical purposes, and next to bayberry, are the best remedy for cleansing the stomach and bowels of "canker." There are three species of the sumac, each of which possesses similar properties, and may be used for the same purposes. The species above named is most used. One species (rhus copallinum) is called dwarf sumac, scarcely ever reaching the height of six feet, and is found in dry rocky ground. A strong decoction of the bark of the root of the dwarf sumac is employed as a sovereign remedy for venereal diseases by the Chippewa Indians.

The leaves of the sumac should be collected in the autumn before they are bitten by frost, and when fully dried, should be packed away and kept secluded from the air.

Sumac Berries should be collected soon after the first hard frost. The dust or powder that coats the berry is the part employed for medical purposes. Dr. A. C. Logan who has collected and prepared large quantities of this article, has the berries thoroughly dried in an oven, and then rubbed over a sieve, by which process the powder is rubbed off and separated from the seed. This powder, generally called sumac dust, is used for cankered sore mouth, and when combined with bayberry powder in the proportion of one ounce of the sumac to four ounces of bayberry, forms a better anti-canker medicine than the bayberry alone. This compound I have used of latter years as a substitute for the compound which Dr. Thomson calls No. 3. The powder from sumac berries and No. 6, mixed together, form a valuable remedy for tetter and ringworm; and also a wash in cases of indolent ulcers and cankered sore mouth.

Sumac Bark should be collected when the leaves are off, or after they have commenced falling. A strong decoction made of the *bark*, or of the bark leaves and berries combined, may be used with advantage in affections of the kidneys, and in all cases of weakness of the uterine organs.

"The gum which exudes from the bark on being punctured, during the summer, is beneficial in gleets and obstruction of the urine."—*Mattson's American Vegetable Practice.*

WHITE POND LILY.

(*Nymphia Odorata.*)

White pond lily grows in ponds and ditches and is readily distinguished by its beautiful white flower. The root of the pond lily possesses astringent qualities, and may be employed in combination with, or as a substitute for, bayberry and sumac when the latter cannot be obtained. The difficulty of collecting and preserving this root, and the fact of its being inferior to bayberry or sumac in point of medical virtue, has occasioned it to be almost abandoned except in making poultices.

The pond lily roots should be collected in autumn or very early in the spring, washed clean, cut into strips and strung upon thread to dry.

WILD RED RASPBERRY.

(*Rubus Strigosis.*)

This shrub grows in great abundance in New England and also in some southern sections of this country.

The leaves, which are the only part employed for medical purposes, are a mild astringent, and so agreeable to the taste that many families use it as substitute for imported tea.

A strong tea of raspberry leaves is a useful remedy for ordinary bowel complaints of infants and children. To be efficient, however, it should be made strong. In treating of this article Dr. Thomson observes: "it is the best thing for women in travail of any article I know of." He recommends a strong tea of it to be given, sweetened, adding a portion of cayenne. A tea of raspberry leaf, adding milk and sugar, is good for infants, and Dr. Thomson asserts that it will prevent sore mouth.

WITCH HAZLE.

(*Hamamelis Virginica.*)

The leaves of the witch hazle furnish an active astringent, and a strong decoction of this article may be used with much benefit as an injection in piles, prolapsus uteri, and in complaints peculiar to females.

The leaves should be collected in the autumn before they are injured by the frost, dried out of the sunshine, and as soon as dry they should be either pulverized or packed in a box and secured from the air. Witch hazle is of too binding a nature to be taken in ordinary cases without a portion of cayenne being added. When used as an injection in female complaints a small portion of cayenne should be scalded with the leaves.

EVAN ROOT.

(*Geum Rivale.*)

This plant is peculiar to low marshy ground, and has received a variety of names, viz: chocolate root, water avens, throat root, purple avens. It possesses slightly astringent and tonic properties, and may be used with benefit in diarrhœa, dysentery, and in bowel complaints in general.

MARSH ROSEMARY.

(*Statia Limonium.*)

This plant, the root of which is used for medical purposes, is found only in salt marshes.

The root of marsh rosemary is a powerful astringent, and is chiefly employed as a remedy for sore mouth and throat. The powdered root has a good effect upon old sores, the powder being put dry into the sore, and a poultice or salve, applied. In long standing cases of piles, where the rectum is in a very relaxed condition, or in fluor albus or whites, when a powerful astringent is required, a portion of marsh rosemary added to witch hazle, or sumac, will form a better injection than either of the latter articles alone.

The marsh rosemary is not taken internally on account of its binding nature.

DEW BERRY.

(*Rubus Procumbens.*)

The root of the dewberry and also that of the blackberry plant, may be used as a substitute for bayberry, or sumac, in the dysentery and in bowel complaints in general.

CROW-FOOT—CRANES BILL.

(*Geranium Maculatum.*)

This plant may be found in many sections of this country. The root possesses actively astringent qualities. A decoction of this root has been used by injection with benefit in long standing venereal disease and fluor albus. The root boiled in milk is a good remedy in bowel complaints of children, more especially when the disease is of a mild character, requiring only astringent medicine.

A strong infusion of cranes bill root, red sumac leaves, and black birch-bark combined, is recommended by Dr. Logan in case of cholera morbus, lax, &c.

BEACH-DROP.

(*Orbanche Virginiana.*)

A decoction of the root of the beach-drop may be employed for the same purposes as that of the crow-foot. The powdered root is a good application in cases of open cancer and indolent ulcers.

The powdered root of the beach-drop, crow-foot or marsh rosemary, stewed in fresh tallow, may be employed as an ointment for external piles and eruptions on the skin.

ALUMROOT.

(*Heuchera Americana.*)

"The roots are a strong and powerful astringent and contain more tannin than the geranium maculatum, detergent, styptic, antiseptic, and vulnerary. The roots to be used in powder, as an external remedy in wounds, sores, and old foul indolent ulcers, it will deterge and soon prepare for the formation of healthy granulations."—*Dr. A. C. Logan.*

TONICS—BITTERS.

To strengthen the system and promote digestion.

The use of bitters are particularly indicated in the latter stages of acute disease, when fever has subsided and the tongue is cleaning; and in all cases where the system is left in a relaxed condition, with feeble digestion after a disease has been broken up. In the suppurative stage of small-pox, and in cases of large abscesses that are secreting matter freely, bitters should be employed, in combination with pure stimulants, with a view to promote digestion and furnish the system with the necessary strength to carry on her healing operations. In chronic disease in general, bitters may be employed indiscriminately, provided the patient be clear of fever.

The vegetable kingdom furnishes a great variety of bitter tonics, of which those mentioned under this head are believed to be the best, and sufficient to fulfil the indications for which tonics are employed.

The chief objection to the use of bitters during the active stage of disease is on account of their tendency under these circumstances to arrest the secretions.

As a general rule, it is better to take all bitter teas cold. Bonesett tea taken cold produces a tonic effect, but taken warm occasions nausea and vomiting. Thomson's spiced bitters designed to supply the place of a stimulant and tonic is generally taken warm.

PERUVIAN BARK.

(*Cinchona Officinalis.*)

The genuine Peruvian bark is one of the most effectual tonics ever employed for the cure of intermitting fever or ague. It may be used as a general tonic in all cases where the use of this class of medicines is indicated. As a general rule, powerful tonics should not be employed in the first stage of disease attended with fever and a dry coated tongue. Under these circumstances, bitters unless combined with a large portion of cayenne, would repress rather than promote the secretions, and aggravate the disease. When, by the free use of cayenne and other appropriate remedies the secretions are restored the tongue cleaning, and the skin warm and disposed to perspiration, then Peruvian bark or other tonics may be employed with advantage.

Peruvian bark is rendered more efficient as a tonic by combining with it Virginia snake root, cloves and cayenne pepper. I frequently mix equal parts of Peruvian bark and spiced bitters, and have always found it a good preparation.

A tea made of equal parts of Peruvian bark and liquorice root is a good remedy for colic in infants, more especially where the spells of colic are observed to come on periodically.

The name *Jesuit's bark* has been applied to the Peruvian bark, from the circumstance of the Jesuits having had the chief control of the sale of the article during its first introduction into use in Europe about the year 1640.

There are three species of Peruvian bark imported to this country, the pale, yellow and red. At one time the *red* bark was esteemed the most valuable. This induced druggists to convert other species into red bark by adulterations which so materially lessened the efficacy of the bark, that at one period the red bark was little used.—Each species of bark above mentioned is efficient as a tonic, provided it be free from adulterations.

Peruvian bark is most active when taken in substance, mixed with some liquid, as a tea of spice bitters, Virginia snake root, a solution of liquorice, or simply with water. The unpleasant taste of the bark will scarcely be perceived when it is taken in a solution of liquorice.

When the bark cannot be taken in substance, its virtues may be extracted by boiling water, and taken in decoction, cold. A small portion of orange peel, liquorice root, or spice, added, will improve the flavour of the tea; and where there is acidity of the stomach

a portion of the sup. carbonate of soda, or sal æratus should be added.

Peruvian bark is often taken in wine, and with the most happy effects in many instances, as in recovery from disease where the strength of the patient is much exhausted.

Dose.—The quantity of bark taken at a time varies from that of a teaspoonful to an ounce. Whilst some recommended it in small doses, repeated every hour or two, others direct an ounce to be taken at once. More especially is it recommended to be taken in large doses, in cases of intermitting fever where by a proper course of treatment the system is placed in a condition that warrants the free use of tonics.

When Peruvian bark or quinine is used, all astringent medicines, viz: bayberry, sumac, No. 3, pills, &c., must be laid aside at the time, as the tannin and gallic acid in the astringents, form an insoluble compound with the active principle of the bark, rendering it inert. Astringents may be used in the forenoon and barks in the afternoon, or *vice versa.*

Three important indications in the treatment of disease are: 1st. To restore the natural warmth of the system. 2d. To cleanse the stomach and bowels of "canker," or morbid secretions; and 3d. To restore digestion. The first requires the use of pure stimulants, and sometimes the application of the vapour bath; the second, the use of astringents and detergents; and the third, tonics. Hence the general indication for the use of tonics is when the secretions are restored and the stomach and bowels cleansed of "canker."

Injections of a decoction of barks retained, will prove almost if not quite as beneficial, as when swallowed, and be employed in this way in children, and in cases where the stomach rejects it, or when patients prefer it administered in this way.

QUININE.

Quinine is an active principle of Peruvian bark, and may be used as a substitute for the bark. Quinine has sometimes been discovered to be adulterated with starch, stearin, sulphate of lime and sugar. There are means, however, of detecting adulterations in quinine, for knowledge of which, the reader is referred to the U. S. Dispensatory.

Quinine is usually taken in the form of pills. Eight quinine pills of the usual size are supposed to be equivalent to an ounce of Peruvian bark. A pill to contain a grain of quinine, (equal to a drachm of bark) must be considered larger than pills are generally made.

It is believed that quinine is rendered more active by the addition of cayenne pepper.

As a cure for intermittent and other forms of fever, when the condition of the system is favourable for the exhibition of tonics, there is probably no remedy of equal value with quinine. This medicine, however, is so easily taken, that it may be used too indiscrimately. It may be continued until large quantities have been taken, the system at the same time not being in a condition to be benefited by its use.

Quinine has been employed with great success, in cases of Neuralgia, or tic-doloreux; more especially, where the attacks of pain are intermittent, like ague fits. It is not to be employed when the tongue is thickly coated, or the patient is labouring under high fever.

There are cases of periodical sick-headach, in which more benefit may be derived from the use of quinine, than from any other remedy. As a preventive, from ten to twenty grains to be taken a day or two before the time at which the attack is expected. It is in these cases, where there is no fever, and the tongue not thickly coated, not too high-coloured, that quinine may be used without previously preparing the system by other remedies.

In fevers, as a general rule, quinine is better adapted to the treatment of cases that occur in spring, winter, and autumn, than in mid-summer.

WHITE ASPEN AND BLACK ASPEN POPLAR.

(*Populus Tremuloides and Populus Grandidentata.*)

The bark of these species of poplar possesses valuable tonic properties. Poplar bark constitutes an important part of the spice bitters. A very strong decoction of poplar bark may be employed as a tonic in any case where a tonic is needed.

The white aspen is not so bitter as the other species, and may be very readily given to children. It is well adapted to cases when the bowels are left in a weak and relaxed condition after dysentery, diarrhœa, &c.

In treating of the poplar, Dr. Thomson says: "The inner bark made in tea, is one of the best articles to regulate the bile, and restore the digestive powers, of any thing I have ever used. The bark may be taken from the body of the tree or from the limbs, or the roots, and the outside shaved off, and preserve the inner bark, which should be dried and carefully preserved for use."

Poplar growing in low ground is said to have stronger qualities than that which grows on dry soil.

BALMONY.

(*Chelone Glabra.*)

This herb, commonly called snake head, is found in low marshy ground and along the sides of brooks and ponds.

Balmony is a strong bitter and may be employed as a general tonic, either singly or in combination with other bitters. The leaves, stems, and flowers, are the parts employed. The herb should be collected when in blossom.

BARBERRY.

(*Berberies Vulgaris.*)

The bark of every portion of this shrub possesses tonic powers, and it is a good article to restore digestion. Barberry, balmony and poplar bark, finely pulverized and mixed together in equal proportions constitute, Dr. Thomson's No. 4 bitters.—This is a valuable compound, and may be employed in all cases where a strong tonic is required.

GOLDEN SEAL.

(*Hydrastis Canadensis.*)

This plant which has received a variety of names, as Ohio kerkuma, yellow poccoon, and turmeric root, is highly esteemed as a tonic by some Thomsonians. The root is the part used, which should be collected in the fall, well dried and reduced to powder.

Golden seal is found in great abundance in Ohio and Indiana, and it is from thence that the principal supply is obtained.

The usual dose is a teaspoonful of the powder, taken in warm water, or steeped in boiling water, and the tea only used.

Dr. Thomson recommends the use of the golden seal for distress, occasioned by indigestion after meals.

VIRGINIA SNAKE ROOT.

(*Serpentaria Virginiana.*)

This plant, the root of which contains both tonic and stimulant properties, grows plentifully in many sections of the United States, and it is said to be a native of this country exclusively.

The Virginia snake root may be employed with benefit in fevers, and in a variety of forms of disease, when the usual bitter tonics irritate the stomach.

The usual dose of the powdered root is a teaspoonful. To make the infusion, pour a pint of boiling water on half an ounce of the root, and let it steep in a covered vessel; boiling the root dissipates its medicinal properties. It may be drank freely in all stages of disease, either cold or warm as the patient may prefer.

CENTUARY.

(*Chironia Angularis.*)

"Of the centuary we have the above species, which is not inferior to the European. It is a beautiful annual plant, growing abundantly in the middle and southern states, and every part of it is medicinal, though the flowers possess the most efficacy. It is a pure bitter, with some little aromatic flavour, neither unpleasant to the taste nor offensive to the stomach; and is resorted to by every description of practitioners, regular and irregular, in our intermittent and remittent fevers. Like some other articles, it has an advantage over the Peruvian bark, of being susceptible of employment in every stage of these diseases. The usual mode of prescribing it is by strong infusion, which is directed to be taken without much limitation."—*Chapman.*

RED DOG-WOOD—RED WILLOW.

(*Cornus Sericea.*)

"This species of cornus is usually six or eight feet in height, with numerous erect stems, which are covered with a shining reddish bark, and send out opposite spreading branches. The

leaves are opposite, petiolate, ovate, pointed, entire, and on the under surface covered with soft brownish hairs. The flowers are small, white, and disposed in terminal cymes, which are depressed and woolly. The fruit consists of globular, berry-formed drupes, of a cerulean blue colour, and collected in bunches."—*U. S. Dysp.*

The red dog-wood is found growing in low wet lands, and along streams in almost every section of the United States.—The bark of this shrub contains valuable tonic properties, and many experienced practitioners assert it to be equal in efficacy to the Peruvian bark, and it may be employed as a substitute for the latter article. Growing in our own country it can be obtained genuine, whereas a great portion of bark imported as Peruvian, is a spurious article, containing little or none of the medical properties of Peruvian bark.

WILD CHERRY.

(*Prunus Virginiana.*)

The bark of this tree has tonic and astringent properties. As a tonic it is inferior in efficacy to either the red dog-wood, or Peruvian bark. It is adapted to cases of consumption, hectic fever and scrofula, and in chronic bowel complaints. It yields its properties to alcohol, and to hot and cold water. Boiling the bark destroys its medicinal powers. The proper plan is to have the bark cut into strips, or pulverized and put into cold water.

QUASSIA.

This tree, the wood of which contains the bitter principle, as it were, in a concentrated form, is a native of Surinam, Jamaica, and the Carribbean islands.

This medicine was first introduced into use by a West India negro named Quassia, who employed it as a secret remedy, which proved successful, in the cure of the malignant fevers of that country. The secret was "disclosed to a Mr. Rolander, a Swede. Specimens were taken to Stockholm by this gentleman in the year 1756, and the medicine soon became popular in Europe. The name of the negro has been perpetuated in the generic title of the plant."

Quassia may be employed as a tonic in cases of general debility. It is usually prepared in infusion in combination with

other tonics, columba, gentian, Virginia snake root, and orange peel.

Tonics are found to be more effectual by occasionally substituting one article for another, or by frequently changing the compound.

TULIP POPLAR.

(*Liriodendren Tulipifera.*)

The bark of this tree may be employed as a tonic, the bark of the root is probably as powerful a tonic as the aspen poplar.

COLUMBA.

Columba root possesses considerable power as a tonic, and as such may be used either alone or in combination with other tonics.

THOROUGH-WORT—BONESETT.

(*Eupatorium Perfoliatum.*)

A *warm* infusion or a decoction of this plant will operate as a nauseant and emetic; when taken *cold* it acts as a tonic only.

Bonesett has been extensively employed of late years in the treatment of intermittent, and remitting fevers. It is employed as a diaphoretic, emetic, and tonic.

A cold infusion of bonesett is an excellent general tonic, useful in cases of dyspepsia, fevers, &c.

YELLOW ROOT.

(*Xanthorhiza Apiifolia.*)

"The bark of the root of this plant is equal if not superior to the golden seal."—*Dr. A. C. Logan.*

CHAMOMILE.

(*Anthemis Nobilis.*)

Chamomile furnishes an agreeable and valuable tonic. It has been a long time employed as a medicine. A warm infusion of

chamomile is often employed in domestic practice to excite perspiration in case of colds. A strong tea of chamomile drank warm will sometimes operate as an emetic. As a tonic or stomachic, the cold infusion is usually employed.

MYRRH.

Gum myrrh exudes from the body of a small tree growing in Arabia, Felix, and Abyssinia, called *Balsamodendron myrrha.* As the juice exudes, it hardens and adheres to the bark.

"Two varieties of myrrh are distinguished in the market—the *India* and the *Turkey myrrh*—the former imported from the East Indies, the latter from the Levant. It is said that the India myrrh is collected in Abyssinia, and thence taken to the ports of Hindostan, while that which goes under the name of Turkey myrrh, is brought from Arabia by the route of Egypt."—*U. S. Dysp.*

There is a great difference in the quality of myrrh. That which comes from Turkey is of a brighter colour, and more free from impurities than the East India myrrh. "When of good quality it is reddish-yellow, and translucent; of a strong peculiar and somewhat fragrant odour, and a bitter aromatic taste. It is brittle and pulverizable, presenting when broken, a shining surface, which in the larger masses is very irregular."

Myrrh is actively tonic, somewhat stimulant, and possesses in a high degree antiseptic properties. It constitutes the most essential ingredient in Thomson's No. 6, or rheumatic drops—one of the most valuable preparations, as a general family medicine, ever introduced into use.

Myrrh has been employed with much benefit in chronic diarrhœa, and diseases of the lungs or chest, attended with a free expectoration and general debility. Its use is also well adapted to female complaints, when unattended by fever.

Myrrh may be taken in the form of pills, infusion, tincture, or the powder may be taken suspended in a liquid.

To make Myrrh Pills.—Take a tablespoonful of finely pulverized myrrh, and of pulverized gum Arabic and loaf-sugar, each a large teaspoonful. Rub these up with a quantity of water, sufficient to form a paste, and make into pills.

To make an Infusion of Myrrh.—Steep an even teaspoonful of pulverized myrrh in a teacup of boiling water, and add a large teaspoonful of sugar, and a small portion of cinnamon.

To make a tincture of Myrrh.—Put three ounces of powdered myrrh, and a quart of alcohol, or fourth proof brandy, into a stone

jug, and boil half an hour in a kettle of water, or let it macerate several days in a warm place.

To prepare the Powder for taking.—Rub together half a teaspoonful of myrrh and a teaspoonful of sugar, then add a teacup half full of lukewarm water, or a tea of cinnamon or liquorice root, stir the mixture, and take before it settles.

When myrrh is taken in the form of pills or powder, care should be observed to select that of the best quality.

Myrrh prepared in either of the forms above mentioned, is applicable to cases of general debility, accompanied by a relaxed condition of the bowels, and an absence of fever. Dr. S. Thomson informs us, that he has discovered it to be a valuable remedy in what are called worm complaints in children.

The efficacy of Thomson's No. 6, and third preparation of lobelia, in preventing mortification in disease of a malignant or putrid tendency, may be partly at least attributed to the *myrrh* contained in these preparations.

Applied to fresh wounds the tincture of myrrh excites healing action and lessens the liability to the occurrence of unhealthy inflammation. It is also a useful application in old sores, ulcerated sore throat, running from the ears, aphthous sore mouth, spongy gums, sore nipples, &c. The tincture of myrrh is also employed to promote the exfoliation of bones. In sinuous ulcers, and cavities that continue to discharge matter in consequence of a debilitated state of the vessels of the part, tincture of myrrh injected into the cavity repeated daily will seldom fail of establishing the inflammatory action necessary to the production of granulations, and a union of the sides of the cavity. Where the parts are too sensitive to admit the tincture to be used undiluted it may be combined with water or Bayberry tea. In cases of scrofulous ulcers, white swellings, hip disease, and wherever there is a free discharge of matter from a part, and the system is in a relaxed condition, the internal use of myrrh will prove especially beneficial.

After a vapour bath and the patient is rubbed dry, washing the surface with tincture of myrrh, affords a means of protection against cold, and strengthens and improves the condition of the skin. This practice is especially useful in cases where the skin is relaxed, and the patient feeble, as in chronic bronchitis, consumption, chronic pleurisy, asthma, dropsy, chronic rheumatism, chronic diarrhœa, marasmus, and in every other form of disease attended by general debility.

Thomson's No. 6 or Rheumatic Drops.

To this compound a variety of additions have been made by different individuals as an improvement upon Dr. Thomson's preparation. The value of this preparation as a medicine depends chiefly upon the myrrh which it contains, and no article can be substituted that will prove more beneficial than myrrh for the purposes to which the No. 6 is generally applied.

To prepare No. 6.—Take an ounce of *African* pepper, one pound of powdered myrrh, and a gallon of fourth proof brandy. Put these into a stone jug, and boil it half an hour in a kettle of water, the jug to be uncorked.

This preparation is employed as a general family medicine by Thomsonians. It is an excellent tonic, and taken soon after meals will remove, or prevent flatulency, and relieve oppression of the stomach. Ordinary colic may be speedily cured by taking freely of No. 6. It is an effectual cure for ordinary colds, provided the patient avoid exposure, and improper articles of diet. Sickness at the stomach, and even severe spells of sick headach may be relieved and frequently cured by a free use of No. 6, together with warm applications to the feet to favour perspiration. It also constitutes a valuable remedy for bowel complaints in general. Taken after meals it will prove a preventive against the summer complaint.

In deeply seated colds attended by a free expectoration of a thick yellowish secretion, the use of No. 6 will be found beneficial. Truly there is scarcely an ailment, in which this preparation may not be used with benefit, except when the secretions are suspended, as in violent fever attended by a dry tongue. In the latter stages of disease, No. 6 may be employed as a restorative, and when there is a tendency to putrefaction, its use is almost indispensable to the recovery of the patient.

As an external application No. 6 has been found useful in rheumatism, neuralgia, night-sweats, dropsy, consumption, and in all cases when the skin is in a relaxed condition. It may also be employed to great advantage in sprains, bruises, fresh cuts, indolent ulcers, putrid sore throat, sloughing ulcers, gangrene, and as a preventive to mortification, both internally and externally.

No. 5 Syrup or Restorative Cordial.

Take of white and black aspen poplar, each half a pound, bark of the root of Barberry one pound, and boil them a few minutes in

two gallons of water, then strain and add seven pounds of good sugar, and simmer until the sugar is disolved, then skim it and add half a pound of finely powdered peach meats, and three quarts of good brandy.

Dose.—From half to a wineglassful three or four times a day.

This syrup is useful in cases of recovery from sickness attended with a weak and relaxed condition of the bowels.

Another method of preparing a restorative cordial is to employ the tincture of myrrh in place of the brandy.

An Objection to syrups in general, except when recently prepared, is their tendency to fermentation. The above syrup, however, may be kept good for years.

UNICORN.

(*Helonias Dioicia.*)

This plant, the root of which possesses tonic properties, is found plentifully in most of the middle, and in several of the western states. It has received a variety of names; Blazing Star, Devil's Bit, and Blazing Star Wort. The root is, in general, about an inch and a quarter in length, from a quarter to three-eighths of an inch in diameter, and its lower extremity terminating abruptly, as though it had been broken off. "The root leaves continue green all winter, and spread upon the ground in the form of a star. They are four or five inches long, narrow at the base, and terminated by a somewhat tapering point. The stem of the male plant is a foot or more in height, and terminates in a long, drooping, and very graceful spike of flowers, which are of a dirty white colour. They remain in bloom from June to July. The stem of the female plant is erect, much taller than the other, and is furnished with flowers of a larger size.—*Mattson's A. V. Practice.*

The author above quoted observes: "The *aletris farinosa*, or *star grass*, which has also received the name of *unicorn*, is often mistaken for this plant. It is similar in growth and appearance, but may be identified by its sharply pointed leaves, and brittle, scaly looking root. It possesses tonic properties, but it is also narcotic and purgative, which renders its use objectionable and sometimes hazardous." This plant, the *aletris farinosa*, has been introduced into Dr. Hersey's work on Midwifery, and also Dr. John Thomson's Materia Medica as the *true* "unicorn root" used by Thomsonians.

The root of the *helonias dioicia*, though spoken of by some in terms of the highest praise, as a remedy, particularly adapted to complaints peculiar to females, yet it is very doubtful whether it possesses any specific properties apart from those of a general tonic.

BITTER ALMONDS, PEACH-MEATS, AND CHERRY STONE MEATS.

All these articles contain valuable tonic properties. The essential oil obtained from bitter almonds and peach-meats by distillation, and supposed to contain prussic acid, does not exist in the almond in its natural state, but is the result of chemical action, which takes place during the process of distillation.

Dr. S. Thomson has, of late years, in preparing No. 6, employed liquor, in which pounded cherry stones have been kept for some time, which he calls "*cherry spirit.*" This is an improvement on the old method.

WINE BITTERS.

Vegetable bitters, tinctured in wine, may be used with benefit in many cases of chronic disease, and in cases of recovery from sickness; but the simple decoction, or infusion, of bitters, is to be preferred to wine bitters in most cases.

A variety of formulas for wine bitters might be given; the following, however, is probably as good as any other:—

Take of best Peruvian bark,			1	ounce,
"	"	Gentian, "	1	"
"	"	Columbo,	1	"
"	"	Virginia Snakeroot,	½	"

add a portion of orange peel, and to this compound, put two quarts of good Madeira, or Sherry wine.

Dose—A wineglassful two or three times a-day.

Dr. Thomson employed sweet Malaga wine for making bitters; and used the same compound as the spice bitters, omitting the sugar, and adding a portion of prickly ash berries.

SPICE BITTERS.

The spice bitters are variously compounded by different individuals. Sometimes I have met with spice bitters that were actively cathartic, and, on other occasions, containing so much of

cloves and cinnamon, as to prove decidedly binding to the bowels.

The following is a good formula: take of black and white aspen poplar bark, finely powdered, each three pounds; of ginger, two pounds; golden seal, two pounds; cinnamon, one pound; cloves, one pound; prickly ash bark, half a pound; cayenne, half a pound; and eight or nine pounds of white sugar. These are all to be finely pulverized, thoroughly mixed together, and then run through a sieve.

Next to composition and No. 6, the spice bitters are more employed than any medicine, or compound, in the Thomsonian Materia Medica. The usual dose is a teaspoonful, prepared in decoction with boiling water, or the powder may be taken with a small portion of lukewarm or cold water. The spice bitters, prepared according to the above formula, afford a mild stimulant and tonic, which may be used with great benefit in many cases, and with safety under all circumstances. As a tonic in intermitting and remitting fever, and in cases of extreme debility and obstinate dyspepsia, the spice bitters are not to be relied upon, as stronger tonics will here be demanded.

LADIES' SPICE BITTERS.

Adding finely powdered myrrh and unicorn root to the common spice bitters in equal quantity with the cloves, constitutes what are termed Ladies' Spice Bitters, or Woman's Friend.

This preparation is well adapted to cases of general debility, and especially in complaints peculiar to females.

To make Conserve of Hollyhock.—Take of poplar bark, bayberry, golden seal, cloves, cinnamon, and American valerian, each an ounce, and half an ounce of cayenne, all finely pulverized, mix them well together, and pass the compound through a sieve. Incorporate this powder and half an ounce of the oil of pennyroyal thoroughly with one pound of hollyhock blossoms, previously pounded into a jelly, and form it into balls of the size of a large marble, and dry them, or put it into jars, to preserve it in a moist state.

The conserve of hollyhock possesses the same properties as the spice bitters, but is rather more active both as a stimulant and tonic. It may be used on all occasions to promote digestion, to warm the stomach and bowels, and also as a preventive to disease. It is a convenient medicine for persons while travelling.

BITTER-ROOT—INDIAN HEMP—WANDERING MILKWEED.

(*Apocynum Androsemifolium.*)

Although Dr. Samuel Thomson recommends bitter-root as a medicine, in his original guide, he abandoned the use of it in his own practice many years before his death. It is an active cathartic and extremely liable if taken in purgative doses to do more injury than good. If used at all it should be given in small doses, not sufficient to purge. It is employed in the regular practice for dropsy of the brain in children. Dr. Logan recommends the addition of a small portion of bitter-root to the No. 4 bitters for cases of obstinate costiveness. It may prove beneficial in some chronic cases given in this way. Combined with other articles it may be given in jaundice, rheumatism, dropsy, and dyspepsia.

NERVINES.

To quiet restlessness, calm nervous agitation, and promote sleep.

AMERICAN VALERIAN.

Several Species.—*Cypripedium humile, pubescens, parviflorum, condidum, and spectabile.*

Common names.—Moccasin flower, Noah's ark, wild lady slipper, umbil, and valerian.

Each of the above named species of valerian possesses the same medical properties. The root is the part employed for medical purposes. The root of the American valerian dried and pulverized constitutes the powder known among Thomsonians by the name of nerve powder. This powder is usually combined with emetics in giving a course of medicine. It is more particularly needed when the patient is of a nervous temperament. From half, to a full teaspoonful may be added to each dose of emetic. The powder may also be taken in hot water sweetened, or it may be added

to any of the medicines when the condition of the patient requires it. The root should be collected in the autumn, washed clean, carefully dried, and kept from the air.

SCULLCAP.

(*Scutellaria lateriflora.*)

This herb has recently been introduced into use as a nervine. It is found growing in meadows and along streams of water. There is a species of scullcap found upon upland, particularly in stubble fields: whereas the species employed for medical purposes is found only in low and marshy land.

I have not made a sufficient trial of the scullcap to form an opinion as to its medicinal powers. It certainly possesses tonic properties, and it may be that its powers of quieting nervous agitation, and tranquillizing nervous excitement depends simply upon its tonic properties. New remedies are apt to be overrated when first introduced, more especially by those who claim the honour of introducing them. I am not one to advocate an extension of the Thomsonian materia medica much beyond its present limits, still from testimony adduced in favour of the scutalaria I do not doubt that its introduction into our materia medica will be a valuable acquisition.

The top of the plant is the part employed, which should be collected when the plant is in blossom, carefully dried and preserved from the air. It may be taken prepared in the same manner and for the same purposes as Thomson's nerve powders.

HOPS.

Hop tea may be used with benefit as a means of quieting nervous agitation and promoting sleep. Hops are most employed in protracted fever and delirium tremens (craziness from drink.)

The yellow powder which may very readily be obtained from hops by rubbing and sifting them, contains the active principle of hops. This powder (called lupulin) by being rubbed up in a warm mortar will form a paste which may be made into pills, and taken for the purposes above mentioned.

PRACTICAL OBSERVATIONS.

I have now made mention of the important articles contained in the Thomsonian practice, and I believe sufficient for the successful treatment of every variety of disease which the human constitution is liable to, that is curable by the agency of medicine. All disease should be treated upon general principles, the great object always to be kept in view is to *assist nature*. The general indications for the cure of disease are—1st. To strengthen and sustain vital action by the employment of pure stimulants and the vapour bath. 2dly. To evacuate the stomach by emetics, and the bowels by injections. 3dly. To cleanse the mucous membrane of the stomach and bowels of morbid secretions or canker, by the use of astringents and detergents. And 4thly. To restore digestion by the use of tonics.

As a *general stimulant* there can be no better article employed than capsicum. It may be used in all cases and under all circumstances, and of itself is sufficient for the cure of almost every form of disease of a mild character. This, together with the remaining articles mentioned under the head of stimulants, are amply sufficient to accomplish all the purposes for which stimulants are employed.

As *an emetic* the *lobelia inflata* is superior to any other article that can be employed; and prepared and administered as directed in this work, no substitute can be used that will answer as well. Besides its emetic powers, lobelia furnishes the surest and most effectual means that can be employed for relaxing the system, removing obstructions, restoring the secretions, lessening violent excitement of the arterial system, and of maintaining an equilibrium of nervous power, and without the least degree of danger to be apprehended from its use.

To *cleanse the mucous membrane of the stomach and bowels, of thickened tenacious secretions or "canker,"* we have bayberry and sumac; and when these are collected in the proper season and carefully prepared, they will be sufficient for all the general purposes for which this class of medicines is prescribed.

To strengthen Digestion after the secretions are restored and the stomach cleansed of foul secretions, we are supplied with a variety of articles from the vegetable kingdom containing the bitter principle.

In the different classes of articles above mentioned, we have medicines which, besides fulfilling the general indication above mentioned, also supply the purposes of diaphoretics, expectorants, nervines, emmenagogues, anthelmintics and antispasmodics. Thus

the composition powder, while it acts as a gentle stimulant, promotes perspiration and expectoration; and if taken in substance, operates as a detergent—scouring the mucous membrane of the stomach and bowels of canker. The composition powder also possesses slightly tonic properties; and is good for worm complaints, and strengthens the nerves.

A vast majority of the obstructions and ailments which occur in the human system, depend originally upon diminished power in the stomach—digestion is impaired, the secretions become thickened and coat the mucous membrane of the stomach, the power of generating heat and nervous influence is enfeebled; and whatever part of the system is weakest, that will be the part in which obstructions will be most liable to occur. Hence, in the treatment of disease in general, the most important object, in the first place, is to give stimulants to support the nervous energy, and rectify the disordered condition of the stomach, and then particular expectorants, diuretics, &c., may be employed with advantage. Thus, in dropsy, for instance, the functions of the skin and kidneys are deranged or in a great degree suspended, in consequence of loss of power in the stomach: and in the great majority of instances, particular diuretics, as they are termed, will prove of little or on benefit until the condition of the stomach is improved. *Acid* in the stomach may be neutralized by taking an alkali, but the alkali does not remove the cause of the superabundance of acid. *Costiveness* may be removed for a time by the use of a cathartic, but it will not restore the natural function of the bowels, but on the other hand, the cause of the difficulty will be increased thereby. *Torpor* of the liver is, in most instances, a consequence of derangement in the stomach, and to restore the natural action of the liver requires the use of means which will cleanse the mucous membrane of the stomach, restore its secretions and invigorate its actions, by which the liver will be furnished with the supply of nervous energy necessary to the performance of its healthy functions.

A Thomsonian course of medicine exerts a beneficial influence upon every important vital function, and will prove the most effectual means of removing obstructions in any part of the system.

An acute disease (attended by fever) that cannot be cured by the aid of Thomsonian courses of medicine, *judiciously administered*, is not curable by any other treatment. At least this is true as a general rule. Not that regular courses of medicine are necessary in all cases, nor even in the majority of cases of ordinary attacks of disease. To keep the patient warm, and restore the natural action of the stomach, and to cleanse it of canker by the use of composition, or cayenne and bayberry, is all that is absolutely required in ordinary attacks of disease.

The introduction of deleterious or inefficient articles and com-

pounds into use by professed Thomsonian or botanic practitioners, has materially retarded the progress of Thomsonism. A man becomes well convinced of the efficacy of Thomsonian remedies, and perceiving that it is a simple and plain practice, engages in it. At first he uses no remedies but the general Thomsonian medicines; but not fully comprehending the principles of the system, he after awhile begins to tamper with cathartics and other worse than useless articles, not because he did not find Thomson's remedies successful, but more from a wrong conception of the true principle of treating disease. He hears of a certain article that is said to act specifically upon the liver; another that is a specific for dropsy: he is told of a certain cathartic that purges without causing debility, and that it may be used on all occasions with safety, being entirely vegetable: until finally he strays entirely from Thomsonism into a complete empirical practice, employing remedies that are liable to do serious mischief.

The articles and compounds hereafter mentioned are to be employed rather as auxiliary remedies in the treatment of disease in general, except in *slight* derangement of the system, where these weaker and less efficient remedies alone may prove sufficient.

CARBONATE OF AMMONIA.

"Carbonate of Ammonia recently prepared is in white, moderately hard, translucent masses, of a striated and crystalline appearance, of a pungent smell, and a sharp penetrating taste."—*U. S. Dysp.*

Exposed to the air, carbonate of ammonia soon becomes changed to a white appearance, and in its texture resembles chalk; when it is no longer of benefit as medicine. Carbonate of ammonia should be preserved from the air by being kept in a glass jar entirely air tight; cut into pieces and put in a vial, or it may be dipped in melted beeswax, and as it is wanted for use, cut off as much as is needed, and apply a piece of wax to cover the part exposed.

Medical Properties and Uses.—Carbonate of ammonia is a diffusive stimulant, and powerfully anti-acid. Its use is adapted to exhausted states of the system, as in congestive and typhus fever, and wherever extreme debility prevails.

The dose is from five to ten grains, or about as much of the powdered ammonia as will lay on a five cent piece. It may be taken dissolved in wine-whey, pepper or Virginia snake root tea; or it

may be taken in the form of pills. The dose to be repeated every hour or two, as the circumstances of the case demand.

Carbonate of ammonia, though much inferior to the third preparation of lobelia in point of medicinal powers, may still be employed with benefit in combination with the third preparation, or with other stimulants, in cases of extreme prostration.

The unpleasant taste of the ammonia may be disguised by dissolving it in gum Arabic water sweetened with loaf sugar, and to each dose add a drop of the oil of cinnamon.

Dr. Eberle states that carbonate of ammonia has been employed with good success in nervous head-ach.

CAMPHOR.

Camphor is obtained chiefly from Japan, where it is found in distinct grains interspersed throughout the roots and wood of the *Laurus camphora*, a forest tree of that country. Camphor exists in small quantities in some native trees and plants of this country—the common sassafras, and in rosemary, sage, peppermint, thyme, starwort and lavender.

Camphor is seldom employed internally except in case of colic. It may be taken in the form of spirits of camphor, or take a piece of camphor about the size of an ordinary grain of corn, rub it up with a portion of gum Arabic, myrrh and loaf sugar, then add a wineglassful of water, stir it well and take at once.

Camphor dissolved in Thomson's No. 6, forms a useful application in cases of sprains and bruises.

OIL OF TURPENTINE.

The oil of turpentine is obtained from common turpentine by the process of distillation. Internally it may sometimes be used with benefit in children affected with worms; and also as an adjuvant remedy in low forms of fever. "There is a particular state of fever usually attended with much danger, in which we have found this remedy uniformly successful. The condition of things alluded to, is one which occurs in the latter stages of typhoid fever or lingering remittents, in which the tongue having begun to throw off its load of fur in patches, has suddenly ceased to clean itself, and becomes dry and brownish: the skin is at the same time dry, the bowels torpid and distended with flatus, and the patient sometimes affected with slight delirium. Under the use of small doses of the oil of turpentine, frequently repeated, the tongue becomes moist and less coated, the tympanitic state of the bowels disappears, and

the patient goes on to recover as in a favourable case of fever. We are disposed to ascribe the effect to a healthy change produced by the oil in the ulcerated surface of the intestines."—*U. S. Dysp.*

The oil of turpentine given internally has been found useful in cases of lumbago and sciatica. It has also been employed in severe cases of bilious colic. A tablespoonful of the oil of turpentine beat up with the yolk of an egg, and half a pint of warm water added, may be employed with benefit as an injection in severe cases of bilious colic.

Next to the third preparation of lobelia the oil of turpentine is probably the best remedy, used by injection, in cases of tympanites —a swollen condition of the abdomen—which often occurs in malignant forms of disease and in peritoneal inflammation.

A teaspoonful of oil of turpentine beat up with the yolk of an egg, and a teaspoonful of the mixture taken at a time, and occasionally repeated, is said to be one of the surest means of checking bleeding from the nose in typhoid fever.

Oil of turpentine has been much extolled as a remedy for tape worm. It has also been found useful in neuralgia, locked jaw, dysentery, and in long standing weakness of the urinary organs. It is not, however, to be considered a specific for any disease; but in certain conditions of the system, it may be employed with benefit.

The dose is from five to thirty drops. It may be taken dropped on sugar, or combined with mucilage of elm or gum Arabic and sugar.

As an external application it may be usefully employed in combination with Thomson's No. 6, in low forms of fevers, when the skin is colder than natural. This compound also forms a useful application in case of rheumatism and palsy. It is a good application in chilblains, and also in the cure of various species of eruptions.

OIL OF AMBER.

"Amber is a kind of fossil resin of vegetable origin, occurring generally in small detached masses, in alluvial deposites, in different parts of the world. It is found chiefly in Prussia, either on the sea shore where it is thrown up by the Baltic, or underneath the surface, in the alluvial formations along the coast." —*U. S. Dysp.*

Amber has also been found in Maryland and New Jersey.

Oil of amber is obtained by putting a quantity of powdered amber and an equal weight of sand, into a glass retort, and a gradual heat applied by means of a sand bath; an oil exudes, which is separated from the other matters, which should be kept in tightly

corked bottles. The oil of amber thus obtained is subjected to a process of distillation with water, when it is ready for medicinal purposes.

Medical Properties and Uses.—Rectified oil of amber is an antispasmodic and stimulant, useful in hysteria, violent colic, hiccough, and in water brash attended with cramps or spasms.

A dose of the Oil of Amber, is from five to fifteen drops, rubbed up with a portion of gum Arabic or slippery elm and sugar, and then add a portion of water.

As an external application it is useful in palsy and chronic rheumatism.

It may also be used with benefit in whooping-cough—applied along the course of the spine, morning and evening.

OIL OF HORSEMINT.

Oil of horsemint may be used internally in cases of colic, heartburn, water brash, and in gout or spasms in the stomach. The dose is from two to five drops mixed with sugar and water. The oil of horsemint applied to the skin produces a very sudden rubefacient effect, causing redness of the skin, and even blistering.

OIL OF JUNIPER.

Oil of juniper is obtained from juniper berries. It is frequently adulterated with turpentine.

Oil of juniper promotes the secretion of urine, and may be employed with advantage in many cases of dropsy. It has been found useful in other complaints, as in chronic bronchitis, chronic disease of the kidneys, gleet, and fluor albus.

OIL OF PEPPERMINT.

The oil of peppermint is used to relieve colic, overcome nausea, and check vomiting. The dose of the oil is from one to three drops, first rubbed up with sugar and then water added.

The Essence of Peppermint, is made by combining two ounces of the oil with a pint of alcohol. The dose of the essence is from ten to twenty drops.

OIL OF ANISE SEED.

The oil obtained from anise seed is well adapted to colic pains in infants, on account of its mildness. The dose is from three to fifteen drops, rubbed with a small quantity of loaf sugar, and then add a teaspoonful or tablespoonful of hot water.

OIL OF CARAWAY.

Oil of caraway is chiefly employed to disguise the taste of medicine, and is much employed by nostrum venders to give an agreeable flavour to syrups and pills.

VEGETABLE BALSAMS.

BALSAM COPAIVA.

Balsam copaiva is obtained from the *copaifera officinalis*. This tree is a "native of Venezuela, and grows in the province of Carthagena, mingled with the trees which afford the balsam tolu. It grows also in the West India Islands particularly Trinidad and Martinique, where it is said to be naturalized. The juice is obtained by wounding the tree; and the operation is said to be performed several times in the same season. As it flows from the wound, it is clear, colourless, and runs thin, but soon acquires a thicker consistence and a yellowish tinge."

Balsam copaiva has long been employed as a remedy in gonorrhœa and fluor albus. In a favourable condition of the stomach the use of balsam copaiva is particularly beneficial in the above named complaints. It may also be employed with advantage in chronic bronchitis attended with a copious expectoration of thick yellowish secretion. It has also been found serviceable in cases of chronic diarrhœa.

The dose of copaiva is from fifteen to thirty drops, repeated three or four times a day. It is usually taken rubbed up with powdered

gum Arabic or powdered elm and sugar, adding a drop or two of the oil of peppermint or cinnamon, to which add a sufficient quantity of water to form it into a consistency convenient to be taken. Another method recommended for taking this medicine is, to drop the copaiva in a wineglass half full of water, and immediately drop on it a few drops of a bitter tincture ; the copaiva is collected in a globule and may be swallowed without imparting its peculiar taste to the mouth. Recently, however, the balsam copaiva is taken enclosed in capsules, by which both the taste and odour of the article are completely disguised.

BALSAM TOLU.

Balsam tolu is obtained from a tree growing near Carthagena. It is obtained by making incisions into the trunk of the tree from which a juice exudes which is allowed to concrete. On keeping, the balsam becomes hard and brittle like resin.

The dose is from half to an even teaspoonful of the powdered balsam. "The best form of administration is that of emulsion, made by triturating the balsam with mucilage of gum Arabic and loaf sugar, and afterwards with water.

Balsam tolu is found beneficial as a remedy in long standing cough, chronic catarrh and bronchitis.

FIR BALSAM.

Canada Balsam.

The tree which furnishes this balsam grows in Maine and Canada. The balsam collects in blisters on the body of the tree, which are pierced and the liquid received into vessels.

Uses.—Balsam of fir is employed for the same purposes for which balsam copaiva is used. The fir balsam is inferior to the balsam copaiva in point of medicinal powers. The usual dose is about twenty drops. It may be taken rubbed up with a portion of sugar or gum Arabic.

PENNYROYAL.

Pennyroyal tea drank warm, promotes perspiration, and may be employed with safety in all cases of sickness. It is much used even in the old practice to promote the menstrual secretion.

DITANY.

This herb possesses properties similar with those of the penny-royal, and may be used for the same purposes. Hot ditany tea, taken at bed-time, is good for common colds.

CATNIP.

Catnip tea is used successfully as a remedy for colic, and flatulency in infants. A few drops of tincture of lobelia added to each dose of the tea, improves its medicinal qualities.

HOARHOUND.

Hoarhound is used chiefly in colds, and catarrhal affections. It is slightly tonic and promotes expectoration.

SCABIOUS.

Errigeron Philadelphicum and Errigeron Canadense.

Each of the above species of the errigeron grows plentifully in the fields in the vicinity of Philadelphia. By some the errigeron is called *fleabane.*

A tea of the scabious is an important remedy in cases of gravel, and inflammation of the neck of the bladder; and may be used freely in complaints of the kidneys and bladder.

"The Errigeron Canadense is a very effective diuretic sudorific, emmenagogue, tonic, and pectoral, very efficient in uterine disease, and almost always agrees with the stomach, and is very beneficial in cases of gout and gravel."—*Dr. A. C. Logan.*

HONEY.

Honey is highly nutritious, and very useful in many cases of sickness, more especially in complaints of the urinary organs, attended with stoppage of urine, or strangury. In these cases, it may be employed to sweeten teas with, such as composition, sumac, pipsissewa, scabious, burdock, or any other article that may be employed in those complaints. Some experienced physicians state, that they have found more benefit from the use of honey, than from any other article, in some cases of strangury, and gravel.

Honey disagrees with many persons taken as food, occasioning severe colic pains. Eating it with milk, however, will prevent any unpleasant effects.

PIPSISSEWA.

(*Pyrola Umbellata.*)

This evergreen, of which the tops and roots are both used, possesses some valuable medical properties. A decoction of this plant may be used with benefit as a common drink in scrofulous eruptions, rheumatism, dropsy, and in complaints of the urinary organs in general. Sweetened with honey and drank freely, it will in general promote the discharge of urine, relieve stranguary, and assist expectoration.

In order too btain the full strength of the pipsissewa in decoction, it should be boiled half an hour in a stone or crockery ware vessel.

CLEAVERS.

There are several species of the cleavers, all of which possess similar properties. A strong decoction is said to be useful in urinary obstructions, and in inflammation of the urethra or neck of the bladder.

BURDOCK.

The root of Burdock cut into thin slices and put into sound cider, adding a small portion of horseradish and mustard seed, furnishes a wholesome drink; and in certain conditions of the stomach—where the patient has a desire for cider, as is often the case after fevers, this preparation may be found not only grateful but it will also strengthen the digestive functions. In dropsy, after the stomach has been cleansed, and the patient has passed through a course of general constitutional treatment, this cider preparation will generally prove beneficial, giving tone to the stomach and promoting the secretion of urine. Burdock root steeped in boiling water, and the tea drank freely, is good in cases of scrofulous humours. Severe cases of scrofulous sore eyes have been cured by the free use of this tea taken internally, and using the tea as a wash to the parts affected.

CUBEBS.

Cubeb berries, are the fruit of a running plant, growing in the East Indies.

"Cubebs are gently stimulant, with a special direction to the urinary organs." In Java, this medicine has acquired a high reputation as a cure for gonorrhœa, gleet, fluor albus, &c. The dose of the powder is from twenty to forty grains; or from half to a teaspoonful taken in warm water, and repeated three or four times a day.

PRICKLY ASH.

Zanthoxylum Fraxineum.

The prickly ash is a bush growing in wet and shady places, and seldom exceeds in height ten feet. "The leaves are alternate and pinnate, consisting of four or five pairs of leaflets, and an odd terminal one, with a common footstalk which is sometimes prickly on the back, sometimes unarmed. The leaflets are nearly sessile, ovate, acute, slightly serrate, and somewhat downy on their under surface." "The flowers are small and of a yellow colour, growing in little clusters close to the branches. They appear in May, in advance of the leaves. The seed vessels have the appearance of berries; and during the summer, change from a green to a red; in the autumn they assume a brownish colour, and open by three valves: exhibiting a black polished seed in the centre." —*Mattson.*

"Dr. Bigelow informs us that the *Aralia spinosa*, or angelica tree, which grows in the southern states, is occasionally confounded with the *zanthoxylum fraxineum*, in consequence partly of being sometimes called, like the latter, *prickly ash.* Its bark, however, in appearance and flavour is entirely different from the zanthoxylum. —*Wood and Bache.*

The bark and leaves of prickly ash are extremely pungent when chewed. The pulverized bark seed and capsules, added to other tonics constitutes a good medicine in cases of rheumatism, where a tonic is wanting. A decoction of these articles alone, or combined with cayenne or composition may be used in any stage of rheumatism. It is stated that a decoction of the prickly ash bark is a useful remedy in venereal complaints, fluor albus, and in general weakness of the urinary organs. The berries may be used to impart an agreeable flavour to wine bitters.

SARSAPARILLA.

There are various species of sarsaparilla, only a few of which, according to the observation of some travellers, possess any valuable medical preperties. The American sarsaparilla appears to be entirely inert. Indeed the majority of that which is imported is of little value, from which circumstance no doubt it has lost its reputation with many as a medicine. "The only criterion of good sarsaparilla which can be relied upon is its taste. If it have a decidedly acrid impression in the mouth after having been chewed for a short time, it may be considered efficient; if otherwise, it is probably inert."

To prepare a simple Decoction of Sarsaparilla.—Bruise thorough-

ly the roots of good sarsaparilla, sift out the dirt, pour on boiling water, and let it steep two or three hours by a fire in a covered vessel: strain and sweeten with sugar or honey.

To make Sarsaparilla Beer.—Take of sarsaparilla root bruised one pound; guaiac shavings, anise seed and liquorice root each two ounces; good molasses one pound; and half a dozen bruised cloves; pour upon these two gallons of boiling water, and shake the vessel several times a day. After fermentation takes place it is fit for use.

Compound Decoction of Sarsaparilla.—Take half a pound of bruised sarsaparilla, bark of the root of sassafras sliced, guaiacum wood rasped, liquorice root bruised, each *an ounce;* pour on these ingredients, half a gallon of boiling water, and let it boil a quarter of an hour and strain.

Excepting the omission of one article, this decoction is an imitation of the celebrated *Lisbon diet drink.*

The decoction may be sweetened with rock candy, sugar or honey.

Syrup of sarsaparilla may be made in the following manner. Take of good sarsaparilla bruised *two pounds;* guaiac shavings *three ounces;* red rose leaves, and liquorice root bruised, each *two ounces;* add to these ingredients five quarts of diluted alcohol, and let it macerate fourteen days, then strain through thick muslin. Evaporate the tincture by means of a water bath, to four pints and a half; then add eight pounds of refined sugar, and simmer until it forms a syrup. Then take a teacup half full of the syrup and add to it a teaspoonful of the oil of winter green, mix them thoroughly, and stir it into the whole of the syrup.

Uses.—Sarsaparilla either in decoction or syrup, is often found beneficial in scrofula where the patient is in an emaciated and feeble condition; in mercurial disease; secondary syphilis; various eruptive diseases; and in a great variety of complaints of long standing attended with emaciation and debility.

PURPLE ARCH ANGLE.

(*Lycopus Verginicus.*)

The arch angle grows plentifully in meadow lands and along the margin of brooks. The purple arch angle, which is readily recognised by the purple colour of the under side of the leaf, is highly esteemed by Dr. A. C. Logan, as a remedy in disease of the heart, fevers, &c. The infusion may be drank freely, in any case

of sickness. Dr. Logan says "it will reduce the pulse rapidly, more so than digitalis, and without any of the bad effects always to be feared from the use of digitalis."

GUAIACUM WOOD.

Guaiacum wood is imported to the United States from the West Indies, in the form of logs or billets. It is commonly called *lignum vitæ*. It is possessed of some medicinal properties, and is employed in cases of chronic rheumatism, cutaneous eruptions and scrofula. The wood is kept by apothecaries in the form of raspings or shavings. The wood yields the greater part of its properties to boiling water. It is seldom, however, administered alone, being mostly combined with other articles, particularly sarsaparilla. The concrete juice of the guaiacum tree, commonly called *gum guaiac*, is employed for the same purposes for which the decoction of the wood is given. It may be taken either finely powdered and mixed with molasses or syrup, or in the shape of emulsion with powdered slippery elm, sugar and water, or in tincture. The dose of the powder is from half to a teaspoon, even full. Guaiac is sometimes added to Thomson's No. 6, and administered internally in cases of rheumatism, gout, female weakness, mercurial disease and syphilitic taint of the system.

PRECIPITATED CARBONATE OF IRON.

This preparation is well adapted to the cure of chronic disease unattended with fever, as in dyspepsia, chlorosis, amenorrhœa, hysteria and neuralgia, where there is absence of fever, the skin pale, and the system relaxed. It is quite harmless, "always having been regarded as one of the metallic substances friendly to the living system." "It increases the activity and volume of the pulse, corrects the state of the blood and secretions, and invigorates the whole system."

The dose of the precipitated carbonate of iron is from five to sixty grains; mixed with mucilage of elm or gum Arabic. As a general rule a teaspoonful repeated three or four times a day is the proper quantity for an adult. Acids and astringents to be avoided when this medicine is taken.

WORM WOOD.

This garden shrub possesses the bitter principle in a high degree, and may be employed as a bitter tonic.

TANSY.

Tansy is used both as a tonic and vermifuge. For children supposed to be affected with worms, the leaves, either in the green or dried state, are boiled in milk, and a wineglassful given three or four times a day. It is particularly adapted to a feeble and relaxed state of the system where the use of tonics are indicated.

SLIPPERY ELM BARK.

(*Ulmus Fulva.*)

Slippery elm bark is employed as a demulcent, by stirring the finely ground bark into hot water, or by pouring hot water upon the bark unground, and allowing it to steep. The mucilage of slippery elm bark is very nutritious, and it may be employed as an article of diet in fever, pleurisy, inflammation of the lungs, scarlet fever, diarrhœa, dysentery, and in any other form or variety of disease, especially when accompanied with fever, for the stomach is very rarely in a condition to digest food when it is so much disordered as to occasion fever, except the food be of the lightest kind, such as elm gruel, barley water and gum Arabic water. A mucilage of slippery elm sweetened with loaf sugar or rock candy, adding a portion of lemon juice, is a good remedy for cough that is attended by fever and a dryness of the tongue.

To form an emollient poultice there is no article superior to finely powdered slippery elm bark.

YELLOW DOCK.

The root of the narrow-leafed yellow dock is useful in tetter, itch, and in other cases of eruptions of the skin. A tea of the root should be drank, and an ointment or tincture of the root applied to the eruptions.

Two ounces of the dried root pounded, to a pint of vinegar is a good application for tetter.

SYRUP.

Take four ounces comfrey root dried; two ounces elecampane; and one ounce hoarhound. Boil in three quarts water down to three pints. Strain, and while warm add half an ounce of beth

root pulverized, a pint of brandy and a pound of loaf sugar. Dose a small wineglassful three or four times a day. Considered useful in cases of female weakness in general.

ACIDS.

VINEGAR.

The use of vinegar on food promotes digestion in particular conditions of the stomach. With the addition of salt and cayenne pepper, it constitutes pepper sauce. This preparation is useful as an internal remedy in many cases of disease, and particularly so in some cases of fever, where the patient desires or craves acids. I know families who depend almost exclusively upon the internal use of a mixture of salt and vinegar in all cases of dysentery and bowel complaints. Although this is undoubtedly a valuable remedy, yet certainly not one to be relied upon exclusively, in diarrhœa or dysentery. Pepper sauce forms one of the best applications for the cure of ulcerated sore throat which so often attends scarlet fever. The throat must be swabbed with the mixture and a dose occasionally administered. On many occasions when patients have expressed a desire for acid, I have directed them to take stale wheat bread dipped in vinegar, and it has agreed well with the stomach in every case where I have recommended it. Within the past month a patient of mine eat freely of bread soaked in vinegar and continued to take it three or four days, not only without receiving any injury from it, but on the contrary it was evidently of especial benefit as a medicine. This patient was affected with a form of disease which would have been termed congestive fever by medical men in general.

Some dyspeptics find nothing to set so well on the stomach as bread and butter dipped in vinegar. Even in cases of sour stomach, vinegar or lemon juice has been found in some instances to suit the stomach better than alkalies.

Lemon juice may be used for the same purposes as vinegar in cases of sickness. Very often we find that a mixture of lemon juice and sugar, in the form of syrup, to suit the stomach remarkably well in cases of disease, particularly in fever.

Pepper sauce is useful as an external application in cases of sprains, bruises, rheumatism, &c.

ELIXIR OF VITRIOL.

This preparation consists of sulphuric acid, alcohol, and the essential oil of ginger and cinnamon.

I have employed elixir of vitriol with especial benefit in some cases of disease, and though seldom employed in the Thomsonian practice, still I do not perceive any objection to its use as a medicine in the diluted state in which it is administered. It may be employed to moderate night sweats, and as a tonic in intermitting fever or ague, particularly when the system is brought into a condition to admit of their use. In hectic fever and in consumption attended with urgent thirst, a few drops of the elixir of vitriol, added to a glass of water, will prove grateful to the taste, and tends to check thirst.

The dose of elixir of vitrol is from ten to thirty drops taken in a wineglassful of water, or in ginger or bitter tea. It is often given combined with a decoction of Peruvian bark, in cases of remitting fever.

ALKALIES—ANTI-ACIDS.

Super-Carbonate of Soda—Bi-carbonate of Soda.

Soda is obtained from the ashes of sea weeds. It is subjected to certain processes by which it becomes purified and well adapted to general use as an anti-acid, in the form of the sup. carbonate, or bi-carbonate of soda.

It is a stronger anti-acid than pearl ash, and is preferable to the latter on account of not being as liable to impurities as pearl ash is on exposure to the air, or from long keeping.

Soda is preferable to sal æratus for neutralizing acid, and in assisting the operation of emetics.

Sup. carbonate of soda will generally overcome heartburn, and affords great relief in case of acidity and distress at the stomach after eating. It is a favourite medicine with epicures.

SAL ÆRATUS.

Sal æratus, as it is commonly called, is the bi-carbonate of potassa. It is employed in the place of pearl ash, being less liable to impurities than the latter. It is used for the same medical purposes as the sup. carbonate of soda. It is morused by Thom-

sonians than the sup. carb. soda, but it is not so strong an alkali as soda, and it is more unpleasant to take.

HICKORY ASHES.

A tea made by pouring boiling water on hickory ashes, may be employed as an anti-acid when bi-carbonate of soda or sal æratus cannot be obtained. A tea of hickory ashes has been used with much benefit in some cases of dyspepsia attended with a superabundance of acid in the stomach.

The following was a favourite remedy for dyspepsia with the late Dr. Physick:

"A quart of hickory ashes, a teacupful of soot, and a gallon of boiling water."

Dose.—A wineglassful of the tea immediately after meals.

CHARCOAL.

The charcoal employed for medical purposes, is generally obtained from those who manufacture gunpowder. In their establishments, the charcoal is burned in iron cylinders by which it is freed from all impurities; then being finely pulverized for the purpose of powder making, it is well adapted also for medical purposes. Common charcoal is rarely entirely clear of impurities, and consequently it is not so well adapted to medical purposes as that prepared by the powder makers. There are processes, however, for purifying the common charcoal and fitting it for medical purposes, as follows:—Fill a crucible with ordinary charcoal reduced to fine powder, and lute on a perforated cover. Then expose the whole to a strong red heat, and continue the ignition as long as a blue flame issues from the aperture in the cover; when this ceases, allow the charcoal to cool, and transfer it immediately to bottles which must be kept well stopped."—*U. S. Dysp.*

Another method.—"Take any quantity of thoroughly burnt charcoal, very light, sonorous and pure, made from the wood of the linden tree, willow, poplar, or some other of the lighter woods, and moisten it with water. Reduce it to powder in an iron mortar, or by means of a mill; and having mixed it with water to form a thin fluid mass, let it stand for a few days; after which place it in linen cloths, to drain. Make up the paste into round cakes, and expose

them to the rays of the sun until they are thoroughly dried. By this process of insulation, the charcoal, it is stated in the codex, is deprived of all adventitious colour and smell, and is singularly improved in efficiency."—*Ibid.*

Chemical properties and uses.—Charcoal is absorbent and powerfully antiseptic. Fresh meat may be preserved for months by being enclosed in a box of charcoal. Tainted meat may be sweetened by placing it it in powdered charcoal.

Charcoal may be used with especial benefit in many cases of dyspepsia attended with putrid or sour eructations. It also proves a mechanical stimulant to the bowels and may be employed to overcome costiveness. In fevers when there is a sour taste in the mouth, charcoal mixed in pepper tea and given freely is attended with good results. I have made considerable use of charcoal combined with other medicine in obstinate costiveness, and have invariably found it useful. It is a good remedy for constipation and heartburn, which so often attend the latter stages of pregnancy.

The *dose* of charcoal is from a teaspoonful to a tablespoonful, to be repeated three or four times a day. To prepare the powder for taking, it should first be made into the form of a paste with a little sugar and water, and then it will combine readily with liquids. By preparing it in spice bitters, composition, or pepper tea, the patient will obtain the benefit of both medicines in one dose. For children it may be mixed with boiled milk. It is stated by some persons who have travelled through the sickly districts of the western and southern states, that by using charcoal freely, even strangers unaccustomed to the climate may reside in those districts without being attacked with disease.

LIMEWATER.

To prepare Limewater.—Take of fresh burnt lime two ounces, put it in an earthen vessel and pour on half a gallon of cold water; stir it occasionally with a piece of wood, and in the course of three hours put it into glass vessels and keep them corked. Pour off the clear part only for use.

Limewater is good to neutralize acidity in the stomach, to correct offensive breath, and overcome putrid eructations. A lady of this city informs me that for several years her diet consisted of boiled milk with the addition of about one-fourth its quantity of limewater; almost every other kind of food soured in the stomach, causing distress and vomiting. Persons subject to offensive eructations, which they say taste like rotten eggs, will find especial benefit from the use of limewater. Chronic eruptions in children

are generally attended with acidity of the stomach, which may be relieved by the use of limewater. It may be employed with benefit in children who have worms, having the effect, as it is asserted, to dissolve the tenacious mucus in the stomach and bowels which supports worms. It is also useful in ordinary bowel complaints of children.

The *dose* of limewater for an adult, is from two to four ounces. It should be combined with about an equal portion of milk. The dose to be repeated three or four times a day.

PREPARED CHALK.

Prepared chalk is obtained by rubbing a portion of common chalk in an iron or earthen mortar, with a small portion of water; and when rubbed very fine it is put into a larger vessel, and a considerable quantity of water added; then it is to be thoroughly stirred so that the fine particles of chalk will be suspended in the water, and the impurities, sand, &c. will remain in the bottom of the vessel, or soon settle. This water containing the fine chalk is to be poured into another vessel, and when the chalk settles, the clear water is to be poured off, and the chalk dried.

Medical Properties and Uses.—Prepared chalk is anti-acid and absorbent, and as such it may be employed with benefit in diseases attended with a superabundance of acids in the stomach and bowels. A teaspoonful of prepared chalk mixed with a teacup half full of strong bayberry or composition tea sweetened, forms a useful preparation in bowel complaints of children. In severe cases the use of the vapour bath, emetics and injections must be chiefly relied upon; prepared chalk is to be employed merely as an auxiliary remedy.

STIMULATING LINIMENT.

There are a great variety of stimulating liniments, but that which is frequently alluded to in the practical part of this work, is prepared by my brother, A. Comfort. The basis of this liniment, is gum elastic. It is an imitation of Col. Jewett's liniment, and which I know to be beneficial as an external application. It contains a large portion of essential oils and the liquid of the 3d preparation of lobelia. This liniment is one of the best external appli-

cations I have ever employed. This liniment is well adapted to neuralgia, rheumatism, and chronic eruptions. I have also found it especially beneficial, applied to the surface after a vapour bath in cases of asthma, chronic bronchitis, chronic pleurisy, night-sweats, marasmus, St. Vitus' dance, cholera infantum, and dropsy; and wherever the skin is in a cold or relaxed condition. Spread upon oiled silk or soft leather, it forms a useful plaster in cases of pain in the side, disease of the chest, swollen joints, consumption, &c. &c.

No. 3 PILLS.

No. 3 pills are often mentioned in this work in the directions for the treatment of disease. They contain the medical properties of bayberry root bark, obtained by first making a strong tincture of the bark, and by a slow heat the alcohol and water are evaporated, leaving an extract in the vessel. A glass vessel must always be employed for obtaining the extract of bayberry, or of any of the astringent medicines. Iron, or German silver spoons, should not be employed in preparing medicine for patients, or, at least, they should not be allowed to remain long in any astringent tea.

The No. 3 pills may be used in many instances as a substitute for bayberry tea, more especially in chronic disorders, excepting dropsy, as in this form of disease the compound lobelia pills will always be found more serviceable.

WARD'S PASTE.

Take of	black pepper, ground,	8 ounces,
"	dried elecampane root, ground,	8 "
"	fennel seed, powdered.	4 "
"	honey,	1 pound,
"	loaf sugar,	1 "

mix these in a mortar to the consistence of paste, and it is ready for use.

Dose.—A piece as large as a shellbark, every morning, or a piece as large as a chestnut four or five times a-day.

The above preparation has long been a celebrated remedy for piles. It is designed to regulate the bowels and to strengthen the vessels of the parts affected with piles. This preparation may be used to overcome costiveness in general.

OF COUGH MIXTURES.

A great diversity of compounds and syrups may be employed with benefit in cases of cough, yet none of them are to be relied upon further than as a means of relief: the general Thomsonian treatment constitutes the surest means of curing cough. A course of medicine will often relieve a cough, when all other means have failed.

Dr. S. Thomson, in treating of cough, observes, "The general opinion is, that cough is an enemy to health, and ought to be treated as such; but this I hold to be altogether an error, for cough is the effect and not the cause of disease. When the lungs are diseased, there will be a collection of matter, which must be thrown off; and the cough is like the pump of a ship, which discharges the water, and prevents her from sinking: so also the cough throws off what collects in the lungs, which, if suffered to remain, would soon putrify and cause death."

The correct way to cure a cough is to remove the cause and not to deaden the sensibilities by the use of anodynes; for though these may afford relief for a time, they directly tend to impair the functions of the stomach and bowels. There are circumstances, however, under which it may be proper to administer anodynes; for instance, in cases of deep consumption, where the cough is so extremely harassing, as to prevent the patient from sleeping at night.

Ordinary cough, caused by cold, may be cured by taking composition, or pepper tea; whereas, in cases of seated disease of the lungs, courses of medicine will be needed. A variety of cough mixtures, however, of a mild character, may be employed, with more or less benefit, in cases of hard cough, or difficult expectoration.

The most effectual cough medicine that I have employed, apart from Thomsonian courses of medicine, is lobelia, given in broken doses, either in the form of tincture, or in powder.

COUGH POWDER.

Equal portions of lobelia powder, powdered liquorice root, and finely pulverized skunk cabbage root, recently dried, may be sometimes used with more benefit than lobelia alone.

In recent cough, demulcents, gum Arabic, slippery elm, flaxseed, and Irish moss mucilage, may be useful, more especially if the patient be feverish and inclined to drink, whereas, in coughs that have been of long standing, or have become deeply seated, they

will seldom prove of essential benefit. Mucilages may be rendered more agreeable to the taste, and their medicinal properties improved by the addition of lemon juice and sweetened with rock candy, loaf sugar, or honey.

In cough of long standing, syrup of garlic, or onions, and the vegetable balsams, will be found the most beneficial of cough mixtures.

Garlic Syrup.—To make Garlic Syrup, mash the garlic, add warm water, and allow it to stand half an hour, but not heated; then squeeze through a cloth and add sugar.

Onion syrup may be made in the same way as already described.

These syrups are well adapted to cases of long-continued cough in children, hystericky females, chronic bronchitis, whooping-cough, and in consumption.

The following preparation is often employed as a cough medicine:—

Take a tablespoonful of powdered liquorice root, add a pint of boiling water, then strain and sweeten with a tablespoonful of honey, and add the juice of half a lemon. To a wineglassful of this mixture, add half a teaspoonful of the tincture of lobelia. Repeat the dose every two or three hours, as the circumstances of the case may demand.

Thomsonian pepper candy and conserve of hollyhock are much used for cough, and they are generally found to answer a good purpose.

Several other cough mixtures are mentioned in the treatment of colds and bronchitis, which it is unnecessary to describe here.

VOLATILE LOTIONS AND LINIMENTS.

Take of aqua ammonia 5 tablespoonsful,
Spirits of rosemary, 4 ditto.
Spirits of camphor, 1 ditto.

This compound forms the celebrated *Granvill's Lotion*, at one time considered as almost a certain cure for neuralgia, or tic-douloureux, and acute rheumatism. The mode of applying it is to wet a piece of cotton with it, and lay it on the part affected. It must not be rubbed, or it will blister the part. Neuralgia pains

have been cured, in many instances, by the application of Granville's lotion.

AMMONIA LINIMENT.

Take of water of ammonia one tablespoonful, of sweet oil six tablespoonsful, and mix them thoroughly.

This liniment is chiefly employed in inflammatory rheumatism, sprains and bruises.

CAMPHOR LINIMENT.

Camphor liniment is prepared by dissolving half an ounce of gum camphor in four fluid ounces of sweet oil. This preparation may be used in cases of bruises, sprains, acute rheumatism, &c.

SOAP LINIMENT.

This liniment may be prepared by dissolving an ounce of camphor, and of oil of rosemary and oil of origanum, each a fluid drachm in a pint of alcohol; then add three ounces of castile soap, and keep it several days in a warm place.

The above compound forms an article extensively employed as an external application, under the name of opodeldoc.

SIMPLE CERATE.

Melt together *one ounce* of spermaceti and *three ounces* of white wax; and then add *six ounces* of olive oil.

Simple cerate may be employed as a salve to protect raw surfaces from the air. It contains no irritating properties, provided it be made of good articles.

BASILICON OINTMENT.

Basilicon ointment is prepared by melting together *five ounces* of resin, *eight ounces* of lard, and *two ounces* of yellow bees-wax.

This ointment is employed as a salve in cases of ulcers, burns, scalds and chilblains.

GUM-ELASTIC.

The sheet gum-elastic may be applied with marked benefit in

many cases of chronic rheumatism, swollen joints and neuralgia, more especially in neuralgia of the hip, commonly called *sciatica.* The gum should be washed with warm soapsuds before it is applied, and also every time it is removed. In some cases the gum cannot be kept on more than twenty-four hours without occasioning a great deal of irritation. As a general rule the sheet should be taken off, and washed as often as once a-day.

TAR OINTMENT.

Mix a pound of tar with a pint of melted tallow, and stir the mixture until cold.

This ointment is a useful application in tetter and scald head. Tar *water* may be employed with benefit as a wash in cases of scaly eruptions on the face of children.

THOMSON'S SALVE.

Take of bees-wax and fresh butter, each one pound ; of turpentine one and a half pounds ; and three-quarters of a pound of balsam of fir. Simmer by the fire until all the wax is melted, and then strain.

This preparation, commonly called Thomson's *healing salve*, may be employed to protect injured parts from the action of the air, and in this way assist the healing efforts of nature. This and the basilicon ointment may be used for the same purpose.

ASTRINGENT OINTMENT.

Take a pound of sheep suet, melt it, and add two ounces of witch hazle or sumac leaves that have been collected in the proper season and well dried. Simmer these half an hour or more, and strain whilst warm. This ointment may be used with benefit in cases of piles, chafing, chopped hands, sore nipples, &c.

PITCH PLASTER.

Take of Burgundy pitch and Venice turpentine, each one pound, melt them together, and add an ounce of cayenne pepper, and when it cools, if it be found too hard, melt it over, and add a portion of sweet oil.

This may be employed as a general strengthening plaster.

THOMSON'S STRENGTHENING PLASTER.

To make this, take an equal quantity of burdock and mullen leaves, sufficient to fill a large kettle, fill it with water, and boil an hour or more; then strain and boil the liquid down to the consistency of molasses: then add one pound of resin and five ounces of turpentine for every quart of the extract, and after simmering until the greater part of the water is evaporated, pour the compound into cold water, and work as the shoemakers do their wax. The addition of cayenne improves this plaster.

MUSTARD PLASTER.

A simple mustard plaster may be prepared by mixing ground mustard and warm water to form a proper consistency for a plaster. If it is desired to weaken the plaster, wheat or rye flour may be added.

A very common form of preparing mustard plaster, is to take equal quantities of ground mustard and wheat or rye flour, and moisten them with vinegar.

Mustard plasters are often found serviceable when not left on so long as to occasion a blister.

WARM WATER DRESSING.

The warm water dressing is adapted to the early stages of inflammation, as a substitute for emollient poultices.

The mode of Applying.—Take several folds of soft muslin, or a suitable portion of patent lint or carded cotton, wet it with warm water, apply it to the part, cover it with oiled silk, and confine it to the part by a bandage. The oiled silk, by preventing evaporation, will cause the moisture to be retained. The chief advantage of this kind of dressing over emollient poultices, is that it does not become sour or rancid.

ON THE USE OF POULTICES.

It is in the early stage of inflammation, as in boils, felons, sudden swelling of the glands, lacerated wounds, &c., that emollient poultices, such as the bread and milk, elm, flaxseed, and mallows poultice are required.

After a bile or abscess has discharged, the poultice should be made stimulating, with a view to excite the healing action of the part.

In erysipelas, all kinds of poultices are to be avoided.

CAYENNE POULTICE.

Take equal quantities of cayenne and slippery elm powder, mix them with warm water to form a proper consistence for a poultice.

Cayenne poultices may be advantageously employed in cases of weakness of the spine, chronic rheumatism of joints, white swelling, hip disease, chronic pleurisy, painter's colic, lumbago, palsy, and indolent ulcers.

EMOLLIENT AND SLIGHTLY STIMULATING POULTICES.

Take of slippery elm powder two parts, white pond lily root, pulverized, one part; pounded cracker one part; mix with warm water.

This poultice may be used in all cases of biles and tumours attended with inflammation, and in cases of injuries when the flesh is lacerated. It also forms a suitable poultice for acute inflammation of the eyes, and when a part is burned with a red hot iron or live coals, so as to sear the flesh.

STIMULATING AND ASTRINGENT POULTICES.

Take of composition powder and slippery elm, pulverized, equal quantities, wet them with warm water, and then add a portion of sweet lard.

This poultice is well adapted to all cases of bile or abscesses when the matter has discharged, and in old sores that require cleansing.

MALLOWS POULTICE.

Take of mallows, either in a green or dried state, steep them in milk and thicken with elm powder, ground flaxseed or fine Indian meal. This forms a useful poultice in the early stage of biles, felons, whitlows, &c. After a boil or abscess breaks, or is opened, a more stimulating and astringent poultice should be applied.

CATNIP POULTICE.

Catnip leaves steeped in water, and thickened with slippery elm, ground flaxseed, or fine Indian meal, form a poultice that may be applied with especial benefit in cases of earach, and in acute inflammation of the eyes.

CHARCOAL POULTICE.

Take of purified charcoal three parts, ginger one part, slippery elm two parts; mix them in warm water.

This poultice is applicable in cases of putrid and offensive ulcers, and also in gangrene and mortification.

YEAST POULTICE.

Take a quantity of yeast and thicken with a mixture made of equal portions of ginger and rye or wheat flour. Set it in a warm place until it begins to rise.

The yeast poultice may be employed in all cases of gangrene, mortification, &c., sloughing and offensive ulcers.

MYRRH POULTICE.

Equal quantities of the dregs of No. 6 and slippery elm powder, moistened with water, may be employed with especial advantage in cases of indolent ulcers, carbuncle and long standing inflammation. This form of poultice requires to be moistened occasionally, more particularly when it is applied to a part in which there is an unnatural degree of heat.

WILD INDIGO POULTICE.

The bark of the root of wild Indigo pounded fine, and applied to indolent ulcers as a poultice, will soon change the ulcer to a more healthy character; so say those who have tried it.

GUM ARABIC.

Gum arabic exudes spontaneously from the bark of a tree that grows abundantly in many parts of the continent of Africa. "Calculated by nature for a dry and sandy soil," the tree that furnishes this gum "flourishes in deserts where no other trees will grow, and even the date tree perishes. We are told that the camels attached to the caravans derive from it their chief sustenance in many of those desolate regions in which Africa abounds."

Uses.—Gum Arabic dissolved is employed as an article of diet in sickness. The mucilage of it is well adapted to cases of disease where the stomach and bowels are extremely irritable, and where other articles of diet disagree. It is useful as a demulcent, as well as affording nourishment in catarrhal affections, pleurisy, inflammation of the lungs, and in inflammation of the urinary organs. A very good mode of preparing it is to dissolve it in composition, pepper or ginger tea. Prepared in stimulating tea I have found it to agree well with patients affected with diarrhœa and dysentery, and particularly in bowel complaints of infants and children. It is not to be exclusively relied upon, however, as a cure in those forms of disease, but to supply the system with nourishment, and being combined with a stimulant, another important object is obtained. It is asserted that six ounces of gum Arabic taken daily is sufficient to sustain life in a healthy adult. The Moors and Negroes who collect this gum, depend almost exclusively upon it for sustenance whilst they are engaged in collecting and conveying it to market.

CIDER.

Sound cider, more especially old bottled cider, may be taken with benefit in many cases of disease, more especially by patients recovering from protracted fevers, and some cases of dyspepsia. The best time for taking it is at, or after dinner and supper.

A pound of the green, or half a pound of the dry burdock root, and a small root of horseradish, all cut up fine and put to a gallon of good cider, is a very healthy drink, for those whom cider agrees with, and it is said to prove a powerful preventive to pestilential diseases.

The roots of burdock, parsley and horseradish; and mustard seed simmered in good cider an hour or more, is a good remedy in some cases of dropsy. Iron wire put into sound cider forms a tonic that may be given with especial benefit in many cases of debility attended with extreme paleness of the countenance.

ARROW-ROOT.

Arrow-root is obtained from the root of a plant which is a native of South America and of the West Indies.

The greater part of the article kept in the shops called arrow-root, is largely adulterated with potatoe-starch finely prepared. It is believed by some, however, that potatoe-starch is equal to arrow-root in every particular, except that the former is not so agreeable to the taste.

Uses.—Arrow-root is employed as an article of diet in fevers, and in bowel complaints of infants and children.

To make Arrow-Root Gruel.—Mix a tablespoonful of the powder in cold water to the consistence of paste, and then pour this gradually into a pint of boiling water, stirring the water as the paste is poured in. Sweetened with loaf sugar and a portion of lemon juice added, it forms a very agreeable article of diet. For infants and children, arrow-root in usually prepared with boiled milk.

BARLEY WATER.

To make Barley Water.—Take two tablespoonsful of pearl barley, wash it in cold water, and then put it into a sauce-pan adding a quart of cold water, place it over the fire and let it boil slowly until the water is reduced nearly one half. Barley water may be rendered more palatable by having a small handful of stoned raisins or some pieces of liquorice root stewed with it. When done it is to be strained. The addition of ginger not only improves the taste but affords a mild and pure stimulant, and promotes digestion.

Barley is mentioned in the earliest records of history as an article of diet in sickness. It is extensively used in cases of general fever, and in inflammatory affections, when the condition of the stomach will not admit of food, except it be in the form of a demulcent.

To make Milk Porridge.—Take of wheat flour a tablespoonful, mix it with cold water to the consistency of paste, pour it into a pint and a half of boiling water, and after boiling fifteen or twenty minutes, add half a pint of milk. As soon as it begins to boil, after the milk is added, it will be fit for use. It must be salted to suit the taste, and when patients prefer it, loaf sugar may added.

Another method.—Take a portion of wheat flour, say a pint or more, tie it in a bag put into boiling water, and let it boil four or five hours. The inside will be hard and dry and thoroughly baked. The dry part to be grated fine, made into gruel and a portion of milk added, and made to commence boiling, and then it is done. Add a portion of salt. This is well adapted to cases of bowel complaints both in children and adults. In making gruel or porridge, ginger tea may be employed in place of water alone.

Milk porridge, properly made, is an agreeable and nourishing article of diet, and the one mostly taken during and after a course of medicine, except in the early stages of violent forms of disease, as in violent fever, inflammation of the lungs, &c.

In giving milk porridge to patients, a small portion of cayenne should be added, except in cases of children who refuse to take it with pepper. In making milk porridge for children, a piece of ginger-root bruised may be added to the water before the gruel is made.

In ordinary colds and in disease of a mild character, when the digestive powers are not very much prostrated, milk porridge may be used at any stage of the complaint.

To make Oat Meal Gruel.—Take of coarsely ground oat meal three tablespoonsful, and put it in a pint of boiling water; let it boil gently half an hour, stirring it occasionally. Then strain and add a little nutmeg, wine and butter.

When the oat meal is finely ground, it should be sifted and mixed with cold water to the consistence of batter, and then poured into boiling water, allowing it to boil gently, and to be stirred frequently.

To obtain the Essence of Beef or Beef Tea.—Take from one to two pounds of fresh lean beef, cut it into small pieces, sprinkle it with a little salt, and put it into a dry and perfectly clean porter bottle, or into a glass or stone jar, and cork it moderately tight. Set the bottle or jar into a kettle of water, and boil the water an hour or more, and then remove it before the bottle is taken out, it may otherwise be broken by the sudden change of temperature. Essence of beef is highly nutritious and very easy of digestion, and consequently forms an important article of diet in disease attended with extreme debility, as in the advanced stages of fevers, pleurisy, small-pox, dysentery, &c.

Chicken tea may be made in the same manner as above described, and employed for the same purposes.

To make Crust Coffee.—Take some of the crust and thin slices of stale wheaten bread, toast it thoroughly, so that there shall be

no part of it unbrowned; pound it and pour on boiling water, and after steeping ten or fiteen minutes, strain, and it is ready for use. It may be sweetened, and a portion of milk or cream added if the patient prefer it so. Crust coffee is nourishing and generally agrees well with the sick.

To make Panada.—Take some slices of stale wheaten bread, pare off the crusts, and boil them in water four or five minutes, then take out the bread, and a little of the water it was boiled in, beat it fine, and add sugar and nutmeg, and if proper, a little fresh butter and some wine.

To make Mutton Broth.—Take two pounds of the lean part of mutton, and boil it slowly two or three hours in two quarts of water, adding a proper quantity of salt and some parsley. The fat must be skimmed off.

By cutting mutton in thin slices and pounding it, half an hour's boiling will be sufficient.

Chicken broth may be made in the same way. The chicken to be cut up before it is boiled. A small portion of rice, or pearl barley may be boiled in with the chicken.

To make Wine-Whey.—Put a pint of new milk into a sauce-pan that will hold at least two quarts; set it over the fire, and when it is in full boiling and raised to the top of the vessel, dash in it a large wineglassful of Madeira or Sherry wine; set the sauce-pan off, and do not stir it for four or five minutes; then pour the clear whey from the curd into a bowl, and sweeten it with loaf sugar. When it is desired to have the whey more stimulating, use more wine. Good currant wine may be used when neither the Madeira nor Sherry can be obtained.

Wine-whey contains a large amount of nourishment, which is readily absorbed without undergoing the usual process of digestion in the stomach. It operates, also, as a diffusive stimulant, and hence it is an important article in the treatment of typhus fever, and in other forms of disease where the vital energies are much enfeebled.

The chief objection to the use of wine-whey is its tendency to become acid in the stomach. This, however, may, in a great degree, be prevented, by adding to each dose of the whey from five to ten grains of the carbonate of ammonia.

EGG SOUP.

Beat up the yolk of a fresh egg and pour on half a pint of wa-

ter. A little wine, salt, and sugar, may be added. This is highly nutritious, and generally sets easy on the stomach.

Another Method.—Take the yolk of a hard-boiled egg, mash it in a bowl with a silver spoon; then add sufficient of boiling water to make it thin enough to be drank. It may be seasoned to suit the taste of the patient.

Drying Roots and Herbs.—The more speedily roots, barks, and herbs are dried after being collected, the better will their medical properties be retained.

Bayberry root bark, white pond lily root, and other astringent articles, may be dried either in the sun or in an oven. White pond lily root cannot be dried properly without either being strung on a string and hung up, or placed in an oven. Much of the bayberry root bark in the market has been so long in drying, that it is often moulded and in a state of decay. Bayberry root bark should be dried in an oven of a moderate heat, and then all its medical properties will be retained in a state of purity.

Small fibrous roots, such as Virginia snake root, and American valerian, may be very readily dried in a warm room, or in the sun.

Medical herbs retain more of their natural flavour and medical properties by being dried quickly in an oven, at a moderate temperature soon after they are collected. When thoroughly dried, they should be pounded and put into air-tight vessels, or packed in boxes and secured from the air and from dampness.

BRIEF REMARKS IN RELATION TO CLEANLINESS, DIET, &c.

Washing the body in cold water in the morning, two or three times a week, exhilirates the spirits, promotes digestion, strengthens the nerves, and is an almost sure preventive against taking cold.

It is a very bad practice to sleep at night in any of the clothing worn through the day. It occasions restlessness, wakefulness, and terrifying dreams.

Few persons in the community are aware of the importance of keeping the feet dry. During the seasons of the year that the ground is wet and muddy, farmers who are dyspeptic would find great benefit by wearing wooden soled shoes, as has long been the practice in England.

Walking early in the morning before breakfast agrees with many, but with dyspeptics, in general, it tends to impair rather than to strengthen digestion.

Persons of weak digestion should use moderate exercise in the open air soon after meals. This will promote digestion better than taking rest. Severe mental or physical labour immediately after meals, weakens digestion.

Eating between meals is a very injurious practice, unless the food taken be easy of digestion, such as milk porridge, gruel, crust of bread, &c. Allowing children to eat ginger cakes, mint sticks, and other sweet meats, between meals, destroys their natural appetite, makes them feel distressed, and consequently they are cross and fretful, and when the regular meal time comes, they have no appetite, but become hungry before the next meal time; and in this way the stomach is harassed with such food as a child ought never to be allowed to eat. When food is given a child between meals, it should be good bread and butter, boiled milk, milk porridge, egg custard, or some kind of gruel. If a person having a weak digestion eat an apple, or piece of pie, or sweet cake, an hour, or half an hour before dinner, it will, nine times out of ten, destroy his appetite for dinner. The sick, however, often require food in small quantities, and frequently repeated, more especially in recovering from sickness. Under these circumstances it may be given in this way, but it should consist of such articles as are easily digested.

The opinion that vegetable is more easy of digestion, and better suited to the human constitution than animal food, is not correct. There are some individuals of a peculiar organization, who may feel better by using an exclusively vegetable diet, but with the great mass of mankind, a diet of animal and vegetable food, combined, is more conducive to health and strength than a diet restricted to vegetables. Beef and mutton, either roasted or broiled, is less difficult of digestion than vegetable food in general. Veal and fresh pork are hard to digest, more particularly is veal unwholesome when the calf has been kept bleeding slowly two or three days in succession, in order to make the meat look white and delicate. By this abominable practice, the animal is made sick, and consequently the meat diseased.

Poultry, salt pork boiled, turtles, fresh fish, eggs, and all kinds of wild game, are more easy of digestion than vegetable food. I have known dyspeptics who found no kind of food to suit them as well as a tender beef steak, broiled, and eaten with stale wheaten bread and butter. When the liver is torpid, and but little bile secreted, fat meat of every description is unwholesome, but when the liver secretes healthy bile, fat meat is easily digested and is very nutritious.

A great portion of the fresh fish brought to our market are kept too long to be wholesome.

The practice of taking spirituous liquors upon an empty stomach, has a tendency to break down the constitution, causing a state of both physical and mental depression. A good constitution may bear it for awhile, but if the practice be continued, the digestive functions will sooner or later become impaired under its deleterious influence.

Persons when riding in cold weather require double the clothing needed when they are about their accustomed avocations. And again, some persons require double the clothing that others need to keep them warm. Thus a man of a robust constitution and in vigorous health, may bear an exposure to cold with impunity, when one in feeble health would become frozen.

POISONS.

MEANS OF COUNTERACTING THE EFFECTS OF CONCENTRATED ACIDS.

When through mistake, or otherwise, sulphuric, muriatic, or nitric acid, in an undiluted state is taken into the stomach, the best remedy is calcined magnesia, which being an alkali neutralizes acid, and renders it comparatively harmless in the stomach. If magnesia be not at hand, prepared chalk or common chalk may be taken freely, or drink freely of strong soap suds.

As soon as means are taken to neutralize the acid, green or brown lobelia, powdered, should be given in large doses, in order to ensure free vomiting. It may be very difficult to produce vomiting before the acid is neutralized. Alkaline injections should be administered, followed by an injection containing a portion of lobelia.

Means of counteracting the effects of Concentrated Alkalies, such as Caustic Potash, Caustic Soda, pure Volatile Alkali, and Quick Lime.

When any concentrated alkali is taken into the stomach, the means to be employed to prevent fatal effects is the free use of vinegar or of lemon juice. Two tablespoonsful or more of vinegar or lemon juice, should be added to a glass of water, and the pa-

tient continue to drink it freely; and as soon as possible give an emetic of lobelia. In all difficult cases, steaming is highly important.

CORROSIVE SUBLIMATE.

This preparation of mercury is a deadly poison, from one to three grains taken into the stomach is sufficient to produce death.

This poison is decomposed and rendered inert by mixing it with the whites of eggs. When corrosive sublimate has been taken into the stomach, the whites of eggs beaten up in a little water should be given as soon as possible, even to the amount of a dozen eggs or more, and commence at the same time taking freely of lobelia, either the powder in warm water, or in the form of the tincture, or third preparation. If eggs are not at hand, let the patient drink largely of milk in the place of the eggs. No time should be lost to have something upon the stomach and to excite vomiting, and whilst other remedies are in preparation, the patient should drink warm water, and endeavour to excite vomiting by putting a finger or a feather in his throat. When the system is poisoned by the external application of corrosive sublimate, the same course of treatment will be required as above described.

ARSENIC.

When arsenic has been swallowed, vomiting should be effected as soon as possible. The best plan of treatment is to mix lobelia in any form in warm water sweetened, and give it freely. Lime water may also be given if at hand. A piece of unslacked lime thrown into some warm or cold water, will form lime water in a few minutes. It should be strained through linen or muslin, as there will not be time to allow it to settle. To assist in exciting vomiting, run a finger or feather in the throat. After free vomiting is produced the patient should be steamed, kept warm, and take freely of pure stimulants, as pepper, ginger or composition tea, and occasionally a dose of lime water.

A large dose of arsenic will in general cause vomiting, and, therefore, is not so dangerous as a smaller one. A large dose of this poison taken into the stomach and not shortly thrown off by vomiting, will destroy life in a few hours.

I recently witnessed a most distressing case of the effects of arsenic, a large dose of which had been taken for the purpose of self-destruction. The poison occasioning vomiting, the principal part was thrown up; yet a sufficient quantity still remained in the stomach to occasion the most disastrous consequences.—The constitution established an inflammatory action in the stomach to over-

come the effects of the poison, but the attending physician, instead of aiding this restorative action, prescribed sedatives, such as were calculated to frustrate nature's efforts.—At the time that I saw this patient she was taking a preparation of morphine, and small doses of nitre. Nature at this time had been struggling six weeks to overcome the effects of the poison. The patient was suffering from extreme racking pains through all her limbs, and yet had lost the power of moving them, which, with the distress in her stomach, and frequent long-continued efforts to vomit, together with the remorse felt for having made this rash attempt at self-destruction, presented the most distressing spectacle I ever witnessed. The inflammatory action established was the only means by which the constitution could recover from the deadening effects of the arsenic, and this effort should have been aided by employing the vapour bath, and pure stimulants internally to support the secretions and promote the natural warmth of the system. Physicians of the old school may say that such treatment would aggravate the inflammation already existing in the stomach. They are *taught to believe* that it would, but it remains with them to prove it. I *know* experimentally that such a course of treatment would have no other effect than to aid the sanative efforts of the constitution.

Arsenic is prescribed both by the Homœpathic and old school physicians, in Homœpathic doses, as a cure for intermitting fever and various other complaints: an unreasonable and injurious practice which ought never to have been introduced; for it only removes one form of disease by establishing another. And the long-continued and distressing dyspepsia which almost always follows the use of arsenic, is, in nine cases out of ten, more distressing and harder to cure than the original disorder would have been for which the arsenic was prescribed. The best plan of treatment that I have found in cases of dyspepsia occasioned by the use of Fowler's solution and other preparations of arsenic, is an occasional course of medicine, and a free use of cayenne pepper with food, or taken shortly after meals.

ANTIMONY.

Many patients have been greatly injured, and not a few lives destroyed by the use of tartarized antimony, commonly called tartar emetic. This and the other preparations of antimony occasion vomiting upon the same principle that arsenic causes it. Tartar emetic, when taken in ordinary emetic doses, if it do not cause vomiting, is apt to produce active purging, attended by severely griping pain, followed by general prostration of the digestive powers, and loss of tone in the bowels. The best antidote for the an-

timonial preparations is lobelia, given in bayberry, sumac, or raspberry leaf tea; or, it may be taken in strong table tea. After free vomiting is produced, the patient should continue to drink strong table tea, and stimulants. If the patient be cold and chilled, a vapour bath must be administered to aid the operation of the medicine, and to throw the poison out of the blood, provided any should have been absorbed. In cases when the vital powers are greatly prostrated by the poison, the liquid of the third preparation of lobelia should be given as an emetic administered in strong bayberry or table tea, or by injection.

COPPER.

The acetate of copper (verdigris) and the sulphate of copper, (blue vitriol) are actively poisonous. The best antidote is the white of eggs, of which the patient should take freely, and of some preparation of lobelia, until free vomiting is produced. If neither eggs nor lobelia be at hand, the patient should drink largely of warm or cold water, and run his finger or a feather in the throat to excite vomiting.

Copper vessels should never be used for culinary purposes, unless they be coated inside with a metal that is not liable to form poisons, when it comes in contact with acids. Pickles greened in a copper kettle, contain more or less poison. Apples stewed in a copper or brass kettle, will taste of the copper. Iron, earthen, or tin vessels should always be employed for making apple butter.

LUNAR CAUSTIC—NITRATE OF SILVER.

The best antidote for lunar caustic, when swallowed, is common salt dissolved in water. This should be swallowed freely and an emetic of lobelia given.

NITRE—SALTPETRE.

Nitre, so much employed in the regular practice, is, observes Orfila, "venomous both to man and to animals, even where applied to wounds."

The direct effect of nitre upon the system, when taken internally, is to weaken and destroy vital power. Hence it is called a sedative, and medical men, governed in their practice by a false theory of treating disease, employ this article in fever with a view to lessen arterial excitement. The necessary result of such treatment is to

weaken the restorative actions—to saddle nature with a greater burden, and at the same time, cripple her energies.

Nitre has sometimes been taken in doses of from half an ounce to an ounce, in mistake for Epsom salts. Taken in this quantity it is apt to cause violent vomiting, purging of blood, convulsions and sometimes death.

When a large dose of nitre has been swallowed, the patient should drink largely of mucilaginous drinks, as flaxseed tea, or mucilage of slippery elm, and take freely of lobelia until copious vomiting be produced. If the system be in a cold and torpid condition, the vapour bath must be employed, and a moderate and continued warmth applied to the patient in bed, and he should take freely of pure stimulants.

Dr. Samuel Thomson was the first one to call the attention of the community to the worse than useless practice of employing saltpetre in curing meat. It hardens the fibres of meat and renders it more difficult of digestion. There is as much necessity for employing arsenic (rat's bane) in curing meat, as there is for using saltpetre for this purpose. It is probable that scurvy on shipboard, is occasioned by the saltpetre used for curing the meat used on sea voyages.

Poisoning from the fumes of Lead.—This subject is treated of under the head of painters' colic.

Poisoning from Swamp Sumac, (Rhus Vernix) and from Poison Vine, and Poison Oak.—The poisonous effects of the above named articles are usually limited to the surface of the body, and rarely or never attended by serious consequences. The best external application is tincture of lobelia, or salt and vinegar. In severe cases, vapour baths should be administered and an emetic given, the patient continuing to take broken doses of lobelia in combination with composition, pepper or ginger tea.

OPIUM.

Opium for medical purposes is generally taken in the form of laudanum. Notwithstanding the poisonous nature of this drug, it is one of the general medicines employed in the old school practice. It eases pain by occasioning a partial stagnation of blood in the brain, and in this way blunts the sensibilities—smothering disease without removing the cause.

When an over dose of laudanum has been taken, the patient should be made to vomit as speedily as possible. Lobelia in any form may be given freely, and the patient should be made to drink of bayberry tea or strong coffee. If the patient be in a stupor,

the liquid of the third preparation should be poured down the throat, and a tablespoonful of the third preparation administered by injection, followed by an injection of brown lobelia powder in warm water with a view to aid the operation of the emetic.

Mothers would be very cautious how they gave laudanum to make their children sleep; if they were acquainted with the principle of its operation, and were fully sensible of the injurious consequences which such a practice is liable to produce, not only upon the physical, but also upon the mental powers of infants and children.

BELLADONNA.

(*Deadly Nightshade.*)

This powerfully narcotic poison is chiefly found about old buildings, and along walls in shady places. The plant grows to the height of from two to three feet, and bears a round berry which is at first green, then red, and finally they assume a deep purple colour and not very unlike a cherry in appearance.—Children allured, by the inviting appearance of the berries, are not unfrequently induced to eat them, and become poisoned.

The symptoms which follow an over dose of the deadly nightshade are dryness in the throat, dizziness and a swimming sensation in the head, partial blindness, and difficulty of swallowing.

The indications of treatment are, to excite free vomiting; and to sustain vital action by the use of stimulants.

Belladonna is employed to a considerable extent by homœopathic practitioners, particularly in the treatment of scarlet fever. Strong poisons given even in very minute doses may change the symptoms of a disease, but instead of aiding the constitution to cast off disease in the way which nature has provided, the recuperative actions of the system are weakened, and the designs of nature frustrated. 'Tis true that patients recover under this treatment, and probably better than under the old school practice, but where is the evidence that those patients who get well under such treatment would not have recovered even more perfectly without the medicine. Nature does a great deal which medicine gets the credit of.

STRYCHNIA.

Strychnia is one of the most active poisons employed in the old school practice. "With the exception of prussic acid, it is perhaps the most violent poison with which we are acquainted, and should therefore be administered with great caution."—*U. S. Dispensatory.*

Administered even in Homœopathic doses, it is capable of producing the most distressing symptoms. Professor Chapman, of the University of Pennsylvania, asserted that he had been called to two cases of *Tetanus* produced by strychnia, prescribed by a Homœopathic physician.

The injurious effects of strychnia are believed to arise from the poison being absorbed and carried into the circulation. The indications of treatment, are to give freely of the third preparation of lobelia or other active stimulants, and administer the vapour bath, with a view to assist nature to clear the system of the poison.

DATURA STRAMONIUM.

This plant, commonly called Gympson or Jamestown weed, grows about hog-pens, and in other places where the soil is very strong. The leaves and seeds of this weed contain a narcotic poisonous principle. Children are sometimes poisoned by eating the seeds of this plant. "When taken in quantities sufficient to affect the system moderately, it produces more or less cerebral disturbance, indicated by vertigo, headach, dimness or perversion of vision, and confusion of thought, sometimes amounting to slight delirium, or a species of intoxication."

The treatment should consist of emetics and injections followed by the use of composition and other stimulating teas, and when the heat of the system is far reduced, the vapour bath will prove beneficial.

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